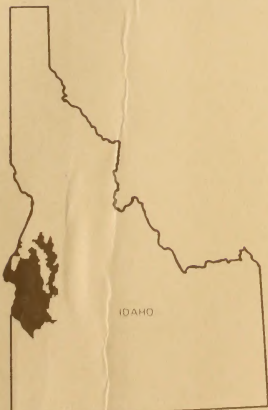




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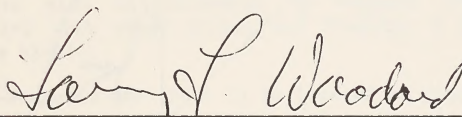


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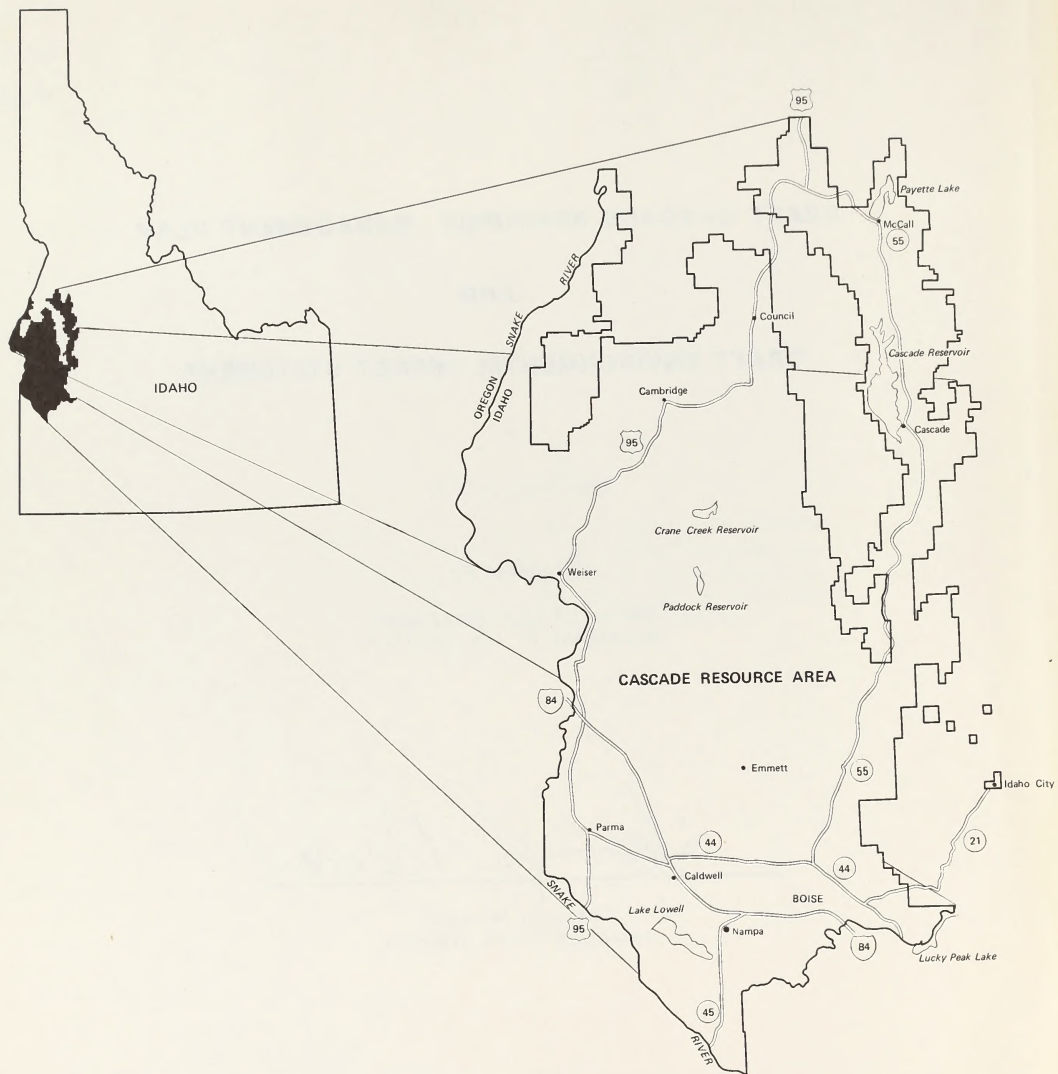
Please retain your copy of this draft RMP/EIS for future reference. The final document may be published in an abbreviated form, including only corrections and/or additions to this draft and public comments with BLM responses.

DRAFT CASCADE RESOURCE MANAGEMENT PLAN**AND****DRAFT ENVIRONMENTAL IMPACT STATEMENT**

Prepared By

Bureau of Land Management
Department of the InteriorA handwritten signature in cursive script, reading "Larry L. Woodard", is written over a horizontal line.Larry L. Woodard
Associate State Director

MAP 1



GENERAL LOCATION MAP

READERS GUIDE TO DOCUMENT ORGANIZATION

This document is structured into two basic sections. Part I is the Draft Resource Management Plan (RMP) for the Cascade Resource Area and was selected from the five alternative plans identified in the draft environmental impact statement (DEIS), or Part II of the document.

This Draft Plan is the preferred alternative (E) in the DEIS and is being presented separately for your review and comments.

After consideration of public comments on this preferred alternative plan, the proposed Resource Management Plan will be prepared and sent out with a Final Environmental Impact Statement (FEIS).

PART I

The Draft Resource Management Plan (RMP), or Part I, begins with a discussion of the purpose of the plan, the planning process, issues and management concerns addressed in the plan, and the criteria for plan development and selection (pages 1 to 8). The Bureau's rationale for selecting this alternative plan is given on pages 9 through 18. An explanation of Multiple Use and Transfer Areas begins on page 18.

The specific management objectives and actions required to implement the draft plan begin on page 23. The three Areas of Critical Environmental Concern (ACECs) proposed in the plan are discussed on pages 31-38. The standard management guidelines for each resource or activity are discussed on pages 38 through 62.

Part I concludes with a discussion on support requirements, the consistency of the RMP with other plans, and finally, a short summary on implementation (pages 62-65).

A summary of the Proposed RMP (Part I) is located on pages iii and iv.

The General Location Map for the plan is found facing page i. All other maps referenced as part of the plan are found at the end of Part I.

PART II

The Draft Environmental Impact Statement (EIS), or Part II, describes and assesses the environmental impacts of five alternative plans for managing the 487,466 acres of public land resources in the Cascade Resource Area.

Chapter 1 discusses the purpose and need of the proposal. Chapter 2 outlines the management goals, objectives, and required actions for each alternative land use plan. The management proposals for each alternative are grouped by resource activity (range, wildlife, etc.). References are made in Chapter 2 to various appendices which give the management actions and resource conditions of each alternative plan. An impact summary of each of the alternatives is presented at the end of Chapter 2.

Chapter 3 is the description of the affected environment; Chapter 4 documents the environmental consequences of each alternative plan; and Chapter 5 outlines the public consultation and coordination which has occurred throughout the planning process to date, and the list of preparers.

The document concludes with a list of references, a glossary and several appendices that provide support data for each of the alternative plans and/or resource activities.

The General Location Map for the Draft EIS is found at the beginning of Part II. All other maps referenced as part of the EIS are found at the end of Part II.

PART I

SUMMARY

DRAFT PLAN (ALTERNATIVE E)

This Draft Resource Management Plan (RMP) is developed to guide the management of public land resources in the Cascade Resource Area and to ensure that the public lands and resources are planned for and managed in accordance with the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations. The plan focuses on resolving the following three key issues identified by the public: range resource management, land tenure adjustment; and management of the Payette River Corridor. Special management concerns also addressed in the plan include access, off-road vehicles, fire management, timber base allocation and special designations.

Goal

The goal of the plan (preferred alternative) is to provide an optimum mixture of protection and enhancement of the natural environment and commodity resource utilization (renewable and nonrenewable).

Plan Summary

After a 5 year monitoring and adjustment period, livestock use would be stocked at 68,000 Animal Unit Months (AUMs), a 3% increase over current levels with the 20 year objective of stocking at 70,536 AUMs. Range improvements would include 15 miles of pipeline and 60 miles of fence. Vegetative treatments would be applied on 18,279 acres. Vegetative treatments would be conducted with methods and seed mixtures of grasses, forbs, and shrubs that benefit both wildlife and livestock. Full fire suppression management would be applied to the entire resource area. The 4-mile wild horse herd would be managed to support 20 head at the end of 20 years.

Wildlife populations would increase for mule deer, elk and antelope. Habitat improvement projects would be done on 23,912 acres. Sage grouse and Columbian sharp-tailed grouse would benefit from improved ecological condition, reduced competition for forbs needed by grouse chicks and inclusion of wildlife needs in range improvement projects.

Riparian habitat improvement projects would be initiated along 7 miles and aquatic habitat improvement projects would be initiated along 11 miles of streams.

For land tenure adjustment, 17,524 acres would be made available for transfer from federal ownership. Of this, 480 acres would be available for potential agricultural development under the Desert Land Entry (DLE) program; 563 acres would be made available for sale, 10,107 acres for sale or exchange, and 6,374 acres for exchange only. Utility rights-of-ways (ROWs) would be restricted on 6,696 acres in the Cascade Resource Area.

Eight miles of the South Fork of the Payette River is recommended for study for possible inclusion into the National Wild and Scenic Rivers System (as a recreation river). Approximately 19,000 acres of the Payette River system would be designated as a Special Recreation Management Area.

Approximately 94% of the resource area would be open to leasable (oil and gas and geothermal) mineral exploration and development and 94% open to locatable mineral (gold, silver, etc.) entry. Withdrawals from mineral entry totaling 31,185 acres would be in effect.

Special designation (National Register of Historic Places) and management of cultural resource areas would be applied to nine cultural resource sites. Area of Critical Environmental Concern (ACEC) designation would be applied to the Boise Front, Long-billed Curlew Area and Columbian Sharp-tailed Grouse Habitat. Special management would be applied to six research natural areas.

An allowable cut level would be applied to 26,663 acres of forest land. Cutting would permit a harvest of 1.0 million board feet annually. Limited firewood cutting would continue.

PART I

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PART I

DRAFT RESOURCE MANAGEMENT PLAN

INTRODUCTION

The Cascade Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 487,466 acres of BLM-administered public land over the next 20 years.

The Cascade Resource Area (CRA) encompasses approximately 2.77 million acres of land bounded by the Snake River on the south and west, the boundary of the Payette National Forest (as far north as Oxbow Dam and Payette Lake), the boundary of the Boise National Forest to the east, the Mora Canal/Boise River to the south and the Ada-Canyon County line from the Mora canal to the Snake River. Of this area, 18% (487,466 acres) is public lands administered by the BLM, 7% (approximately 183,000 acres) is state lands and 75% (approximately 2,100,000 acres) is private or other land holdings. The public land holdings containing both scattered tracts and large blocks of land (Map 2) are located in Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties in Idaho.

The basic purposes of this plan are: 1) to ensure that public lands will be managed in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA), under the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations; and 2) to ensure that the objectives and actions are responsive to the major issues and achieve an equitable and proper balance of resource use and protection as determined through public participation, consultation, coordination, and cooperation.

PLANNING PROCESS

The planning process described in BLM Planning Regulations 43 CFR 1600 used for preparing the RMP contains nine steps. These steps and the dates they were completed are shown in Figure 1. The planning process started in October 1983 and will be completed by October 1987. The process was driven by planning issues identified by the BLM and the general public. These issues are discussed in detail in the following section and addressed in all alternatives.

ISSUES

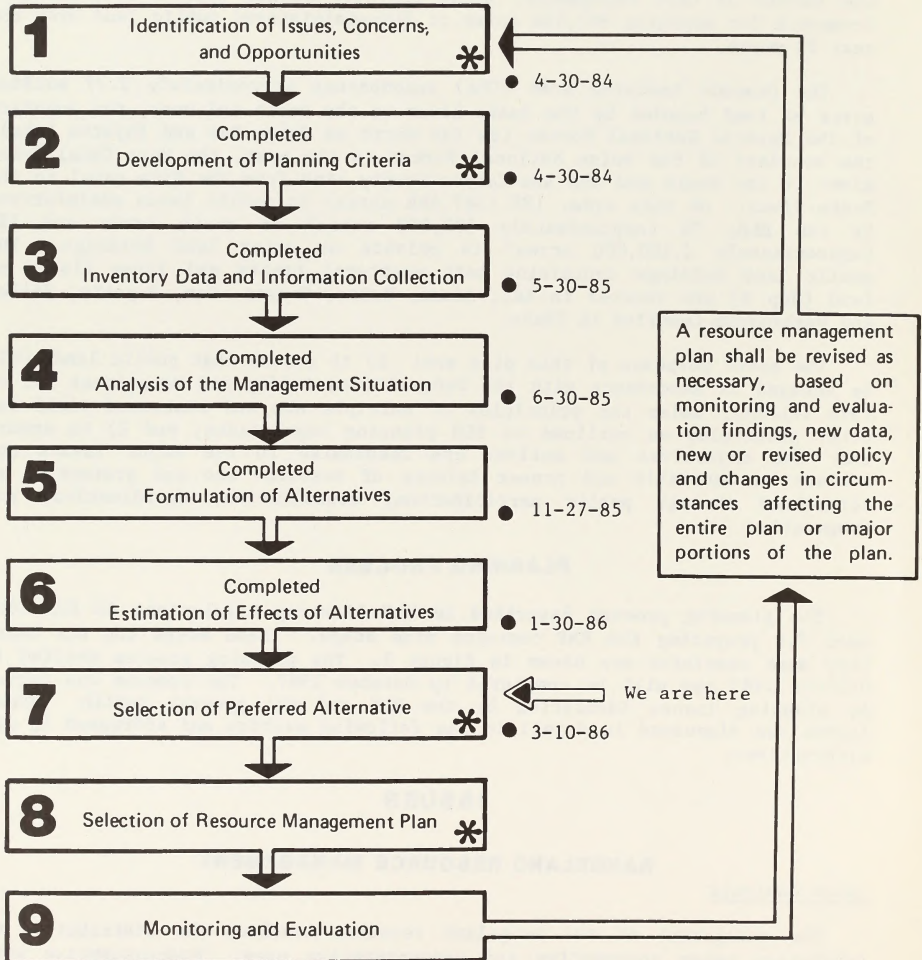
RANGELAND RESOURCE MANAGEMENT

Issue Analysis

The management of the rangeland resource involves the distribution of vegetation among consumptive and nonconsumptive uses. Nonconsumptive uses include protection of the watershed, maintenance of visual or esthetic values, providing for the physiological needs of the vegetation and satisfying habitat requirements of wildlife. The vegetation available for

Figure 1

STEPS IN THE RESOURCE MANAGEMENT PLANNING PROCESS



* Steps Requiring Public Participation

● Date Completed

consumptive uses includes production of forage for wildlife, livestock and wild horses. Other considerations in the management of the range resource include the protection of crucial wildlife habitat (including big game, upland, and sensitive species), the management of riparian and wetland/meadow areas, the development of projects to improve the forage resource base, the management of the wild horse herds and protection of threatened and endangered plants.

Competition exists between and among the interests. As an example, the livestock industry endorses management to increase forage production and in return increase the number of AUMs available. Other interests contend that not enough attention and protection is given to other important uses such as critical wildlife areas or watershed.

Issue Questions

In order to resolve this issue, this plan will address the following questions:

1. In what proportion will vegetation be provided for consumptive and nonconsumptive uses including livestock, wild horses, wildlife, watershed and esthetics?
2. In what proportion will increased vegetation be provided for consumptive and nonconsumptive uses?
3. What areas have the potential and what range improvement practices will be used to increase forage production?
4. What areas will be covered by management plans or intensive management?
5. How will ranges dominated by cheatgrass/medusa be managed?
6. What management and protection actions should be established for riparian, wet meadow, and natural areas?
7. What management actions are needed in critical wildlife and watershed areas?
8. What management objectives, including herd size and use areas, will be established for the wild horse herds?
9. What criteria should be established for fire rehabilitation?

RMP Action Contemplated

1. Identify areas that are currently understocked/overstocked or contain a forage utilization conflict. Propose adjustments as deemed necessary, monitor to further define the extent of the conflict and make appropriate adjustments based on the monitoring.
2. A list of conditions to be satisfied will be developed. Availability (use of) of vegetation will be based on these conditions.

3. Specific sites will have various potentials and be suitable for various treatments. Evaluate the various alternatives and designs of range improvements and identify any conflicts these alternatives may create. The general types, locations and extent of range and watershed improvements will be outlined.
4. Identify areas on which AMP's, HMP's, WHMP's or watershed management plans will be implemented.
5. Evaluate management techniques and monitor areas to determine whether effective management can be applied to this range.
6. Evaluate condition of these zones. Projects will be designed and established for the protection, improvement and maintenance of these areas. Which areas should be managed as natural areas (outstanding, research, etc.).
7. Evaluate AUM utilization, wildlife needs, vegetation condition and soil management and develop management objectives.
8. Determine viability of present horse herds. Determine if present management plans are adequate.
9. A list of constraints or guidelines will be developed for fire rehabilitation areas. Procedures will be detailed on a case by case basis.

LAND TENURE ADJUSTMENT

Issue Analysis

A significant portion of the public lands within the Cascade Resource Area consists of scattered isolated tracts with no legal access. Because of these characteristics, they are difficult and uneconomic to manage. The Federal Land Policy and Management Act of 1976 provides for the transfer (sale or exchange) of such tracts if they are not suitable for management by another Federal department or agency.

In spite of the authority and tract characteristics, segments of the public believe that these lands should be retained in Federal ownership to maintain the public land base or known resource values and preserve future management opportunities and options. Similarly, a second segment of the public believes the lands should be retained, or, if necessary exchanged to block-up existing public land holdings or acquire land with significant public values.

In contrast to the two above, a third segment of the public believes the tracts should be sold.

Issue Questions

The Cascade Resource Management Plan will address the question, "What lands should be sold, exchanged or retained to best serve the public interest and/or improve public land management?"

RMP Action Contemplated

Identify lands for disposal (sale or exchange) or retention.

FUTURE MANAGEMENT OF PUBLIC LANDS IN THE PAYETTE RIVER CORRIDORIssue Analysis

The Payette River System is an important resource area with numerous multiple-use concerns. The concerns involve existing and potential uses including recreation activities on and adjacent to the river, wildlife habitat (including fisheries), timber, minerals, hydroelectric power generation and water quality. There are conflicts between and among these various uses.

Administration of the public lands along the river is a complex issue because of the various interests; State of Idaho, BLM, Bureau of Reclamation, Federal Energy Regulatory Commission and the U.S. Forest Service.

The Payette River system is very popular and use levels for recreation are increasing because of the proximity to the Treasure Valley and the national recognition the river has received for its whitewater boating qualities.

Segments of the river have been identified as having potential for addition to the National Wild and Scenic Rivers System and appeared in the Nationwide Rivers Inventory, National Park Service, January, 1982.

Issue Questions

In order to resolve this issue, the plan will address the following questions:

1. Should the BLM recommend (via the Department of the Interior) that Congress amend the National Wild and Scenic Rivers Act to add the South Fork and Main Stem from the Sawtooth Wilderness Area boundary downstream to Banks, and/or the North Fork Payette from McCall downstream to slack water at Cascade Reservoir and from Cascade Dam downstream to confluence with mainstem at Banks, Idaho as a study river?
2. How should the public lands (BLM) along the river and within the Payette River corridor be managed?
3. What types and levels of recreation use should BLM plan and provide for on those public lands within the corridor?

RMP Action Contemplated

1. The RMP will recommend which segments of the Payette River system should be studied for inclusion in the National Wild and Scenic Rivers System and how the public lands in the corridor will be managed during the interim.
2. Recreation facility developments and use levels will be identified.

3. Make recommendations concerning existing withdrawals and any need for future withdrawals, such as for mineral segregation.

IDENTIFICATION OF FUTURE ISSUES

The Analysis of Management Situation has assessed future management opportunities. New issues/concerns/policy requirements may emerge at any time during the planning process, and if significant, will be added as an issue/concern for consideration in the RMP.

MANAGEMENT CONCERNS

Access

The public expressed an interest in having access to all public lands. The RMP will identify where access to public lands is needed.

Off-Road Vehicles

All public land will be placed in one of three categories - open, limited or closed. The Boise Front MFP designated all land in the planning unit as limited to designated roads and trails, and this classification will stand in the RMP. The Black Canyon MFP identified three areas as open ORV parks while the rest of the area is limited to designated roads and trails.

Fire Management

The RMP will identify specific areas where fire will be used as a vegetative management tool. The entire area has been identified for full suppression.

Timber Base Allocation

The RMP will evaluate changes in the commercial forest base and levels of timber harvest due to acreage lost through exchange or restrictions such as critical, threatened and endangered habitats. A range of harvest levels will be developed in the plan. One will be identified as the preferred level.

Wilderness

The Cascade Resource Area was reviewed for potential wilderness study area status. One area, Box Creek, adjacent to the Payette National Forest was identified because of its proximity to a Forest Service roadless area. There were no lands identified in the scoping process for consideration as wilderness under Section 202 of FLPMA. The Box Creek WSA (110-91A) will be analyzed in a separate wilderness document and not in this plan/EIS.

Special Designations

The RMP will identify areas for special designation and management (ACEC, National Register of Historic Places, Research Natural Areas, Outstanding Natural Area, etc.).

APPROVED MFP PLANNING DECISIONS CARRIED THROUGH RMPBoise Front MFP

Recreation

Vehicular use on public lands will be restricted to designated roads and trails as identified on the Step II overlay. Highland Valley Road and Shaw Mountain Road - will be closed to vehicular travel from January 1 - April 1 for deer winter range protection.

Black Canyon MFP

Recreation

Off-road vehicles - open areas identified on Step II overlay are: 1) Little Gem Cycle Park, and 2) Parma and Dewey ORV Parks. Limited Use Area - restrict motorized vehicles to existing roads and trails throughout the remainder of Black Canyon planning unit.

Wildlife

A long-billed curlew habitat area has been identified in the Black Canyon Planning Unit with management guidelines that include retention of the area in federal ownership, ORV restrictions during nesting season, litter control, and maintenance of the short grass types.

NON ISSUE/MANAGEMENT CONCERN PROGRAMS

Resource programs which have not surfaced as issues or management concerns will be addressed as follows in all alternatives.

Minerals

Areas now open/closed to mineral leasing, exploration, and development will be retained in all alternatives. Any additional segregations/restrictions (or revocations) on mineral activities will be evaluated during impact assessment and adjustments made accordingly.

Visual

Current visual resource management will apply to all alternatives.

Social and Economic

Social and economic concerns will be considered during all phases of the planning process, although no major concerns have been identified at this time.

Cultural and Paleontologic Resources

The RMP will provide for management and protection of these resources at generally the same level in all alternatives unless future information, policy, or public concerns dictate otherwise.

PLANNING CRITERIA

The following general criteria were used to prepare this plan:

1. Social and economic values;
2. Plans, programs, and policies of other Federal agencies, State and local government, and Indian tribes;
3. Existing laws, regulations, and BLM policy;
4. Future needs and demands for existing or potential resource commodities and values;
5. Public input;
6. Public welfare and safety;
7. Past and present use of public and adjacent lands;
8. Public benefits of providing goods and services in relation to costs;
9. Quantity and quality of noncommodity resource values; and
10. Environmental impacts.

Specific Idaho State-wide Planning Criteria (Idaho RMP Guidebook) and Instruction Memorandum ID-83-396 (governing land tenure adjustments) were followed. In addition, the following land disposal criteria were used to guide our land tenure related issues/questions.

1. Lands identified for transfer by sale may also be considered for disposal by means of the Recreation and Public Purposes Act, Desert Land Act, Carey Act, state-in-lieu selection, exchange or other means authorized by law.
2. Lands identified for transfer by "exchange only" will not be considered for disposal by other means.

SELECTION OF PREFERRED ALTERNATIVE

Livestock Grazing Management

The Preferred Alternative would make 449,059 acres available for livestock grazing. These lands would be retained in federal ownership and managed under moderate, intensive and limited management levels. Grazing levels would increase 6% over existing use at the end of 20 years. The amount of lands under stock driveway withdrawal would be reduced to 41,390 acres. Range improvement projects, AMP/CRMP updating and new AMPs would be scheduled for implementation within three time segments 0-5 years, 6-10 years, and 10-20 years.

Rationale

The proposed plan for livestock grazing was selected because it helps meet the rangeland resource management objectives of maintaining or improving the soil, esthetic, wildlife, vegetation and watershed resources. It identifies the potential for increases in livestock use if monitoring studies indicate that the basic resources (soil, vegetation, wildlife, water quality) are adequately being maintained or are improving.

Livestock production is a major component of the local economy. The Cascade Resource Area currently provides about 66,424 AUMs of forage for livestock. Generally, the resource area has limited potential for vegetative improvement through vegetation manipulation or more intensive livestock management due to soil and slope limitations and the invasion of native ranges by annual grasses; Medusahead wildrye and cheatgrass.

Land treatment proposals are included in the plan to improve rangeland condition for livestock, wild horses, wildlife and watershed. The outlook for increased forage production through land treatment is conservative because of limitations on site condition and the low potential for improving rangeland condition. Improvement on native ranges would generally result in ecological site condition class changes within the condition class rather than from one class to another, ie., changes in the fair condition class would improve from poor fair to high fair but not from fair to good. Rangeland that is predominantly annual grass is classified as poor condition. Vegetation manipulation projects to eliminate the annual grasses would improve forage condition but would not represent a change in ecologic site condition. Revegetation of the annual grass ranges would classify these areas as seedlings.

Forage increases would also be realized through more intensive management practices especially in the areas with the greatest potential such as those with native vegetation, good soils and in the higher precipitation zones.

The proposed plan would initially stock the area with 66,424 AUMs of forage for livestock with a gradual increase over the 20 year period to 70,536 AUMs. The increase in available forage would occur through more intensive livestock management and range improvements. Monitoring studies would be carried out in those allotments receiving increased livestock management and range improvements to determine forage increases and stocking

levels. The increases are projected to occur even though the land base would be reduced over the present acreage as a result of transfers out of public ownership (sale and exchange) and limitations would be placed on livestock grazing by other resource activities, ie., curlew and sharp-tailed grouse habitat, crucial big game habitat, etc.

Prior to authorizing forage increases for livestock, rangeland condition would be monitored and evaluated to ensure basic soil and vegetative resources would be maintained or improved.

As land treatment projects are implemented and additional forage becomes available, grazing use would be shifted from areas of poor condition range within respective allotments, so the net result would be reduced grazing use in the poor condition areas. Grazing use shifts would be accomplished by salting, new water developments, fencing, herding, and other management techniques.

Range improvement projects would include mitigating measures to reflect site capabilities and protect other resource values.

Portions of existing livestock driveways are proposed to be eliminated because the need for them no longer exists.

Wild Horses

One wild horse area will be managed to maintain a viable wild horse herd size of 20 horses. Approximately 15,500 acres in the Four-Mile Creek Area will be managed to support this herd.

Rationale

Wild horses in the Four-Mile herd management area would be managed in accordance with the Wild Horse and Burro Act.

The present level of 10-12 horses would be allowed to increase to 20 horses in order to develop a more viable herd. Excess horses would be removed periodically to maintain the maximum number of twenty. If for any reason the capability did not exist to remove horses in excess of twenty, it is felt the herd area could support additional horses for a short duration without causing irreversible damage.

Under the plan, the West Crane horse herd would be removed and the horses disposed of in accordance with conditions of the Wild Horse and Burro Act. The yearlong grazing by wild horses has a negative impact on vegetation. Degradation of the vegetative resource is incompatible with livestock and wildlife management objectives for the area.

The decision to remove the West Crane wild horses from the herd area is based on the determination that uncontrollable horse use is not compatible with intensive grazing management in the West Crane allotment. It has not been possible to implement the grazing system for this allotment.

Wildlife Management

The preferred alternative will provide sufficient habitat to meet or exceed the population goals identified in the most current big game wildlife plans developed by the Idaho Department of Fish and Game. Special management areas or provisions are provided to protect sensitive wildlife species. Approximately 23,900 acres of lands (mostly in crucial habitat) will receive land treatments.

Rationale

Increases in big game numbers from the Idaho Department of Fish and Game management plans were evaluated to determine how projected increases would impact habitat on the public lands. In many of the crucial big game habitat areas, public lands only represent a portion of the total habitat needs. The projected increases on public lands were determined considering the land ownership pattern, habitat potential and compatibility with other resource programs.

Big game numbers in this alternative over the 20 year period would increase by the following percentages for the resource area: +22% elk, +33% deer. Antelope would increase from the current population of 50 animals to 175 animals.

The Black Canyon Curlew management area would receive priority attention for maintaining bird populations at about 1,000 nesting pairs. There may be activities proposed outside the curlew management area that disrupt curlews but efforts to maintain curlew habitat would be maximized in the designated curlew management area. Maintaining curlew habitat outside the curlew management area would be considered in proposing activities in these areas but would not be the dominant consideration as it will be within the curlew management area.

Riparian/Aquatic Resources

Approximately 11 miles of streams have been selected for instream improvements and 7 miles of streams for riparian stream bank planting improvements, while 11 miles of streams would be fenced. Other proposals for livestock management and watershed protection have included provisions that will help to improve the condition on 18 miles of perennial stream habitat and 124 miles of intermittent stream habitat.

Rationale

More intensive livestock management would aid in the maintenance and improvement of riparian/aquatic habitat on 142 miles of streams.

In addition, specific projects would be proposed to correct problems and improve condition on 14 miles of streams.

Standard operating procedures would be incorporated into all management proposals to ensure protection and/or improvement for riparian and fisheries habitat.

Threatened, Endangered, Candidate and Sensitive Plant Species

The preferred alternative recognizes the need to protect plant species needing special protection. Twelve (12) areas have been identified to receive special management considerations that would limit land disturbing activities on these sites. Six of these areas were identified for special designation because of their values to the scientific and educational communities.

Rationale

Six research natural areas would be designated to protect known candidate and sensitive plant species habitat.

Standard operating procedures would be followed in evaluating proposals to ensure compliance with the National Environmental Protection Act and the Endangered Species Act.

New populations of plant species would be protected as they are identified through site evaluations and other inventory programs in the resource area.

Soil and Water Quality

The preferred alternative has given special attention to areas classified as "Potential High Erosion Hazard Areas." Specific management actions have been included in the plan to recognize this situation, such as; limiting rangeland improvements, adjusting stocking levels, fire management activities and limiting ORV use in areas with granitic and sedimentary soil origins.

Rationale

Standard operating procedures would be followed to ensure management proposals are in compliance with soil and water quality standards.

Soils would be managed to maintain productivity and minimize erosion.

A variety of methods would be employed to maintain, improve, protect, and restore watershed conditions. Priority would be given to meeting emergency watershed needs due to flooding, severe drought, or fire.

The 12,000 acre Boise Front ACEC would be designated and managed to help protect the critical watershed as well as other important resource values in the area.

Lands and Realty

Approximately 17,300 (4%) of the resource area is identified as being available for transfer from federal ownership.

Rationale

A significant portion of the Cascade Resource Area consists of small isolated parcels with no legal or physical access. Because of these characteristics many parcels are difficult and uneconomical to manage, and could meet the needs of other agencies or private individuals. However, because of their location, some of these isolated parcels are valuable for access to other lands, possess important wildlife habitat or provide open space qualities to surrounding lands and should be retained in public ownership.

All lands identified for disposal (sale or exchange) would be fully evaluated on a tract basis to determine if they meet the disposal criteria in the Federal Land Policy and Management Act before a final decision is made.

Tracts proposed for disposal through the agricultural development act would be fully evaluated for resource values and economic feasibility before an allowance determination is made.

Rights-of-Ways

Over 480,000 acres of the resource area is available for various types of rights-of-ways. Rights-of-way avoidance areas have been identified and include 14 developed recreation areas/facilities and 12 threatened or sensitive plant species areas.

Rationale

The concept of avoidance areas is the most realistic approach for the Cascade Resource Area because of the fragmented land pattern. In essence the public lands are open for right-of-way proposals with a few minor exceptions to protect specific site values.

The size of the areas to be avoided are relatively small and in designing routes for linear right-of-ways such as powerlines it would be realistic to work around those areas.

Recreation

The preferred alternative recommends that 8 miles of the South Fork of the Payette River be studied for possible inclusion into the National Wild and Scenic River system as a recreation river.

Rationale

The South Fork of the Payette River (Banks, Idaho upstream to the boundary of the Sawtooth Wilderness Area) was identified on the Nationwide River Inventory developed by the Heritage Conservation and Recreation Service/National Park Service. It was determined that this segment meets the basic criteria as described in the Wild and Scenic Rivers Act.

The planning evaluation determined that because of past development the South Fork could not qualify for any ranking above the recreational component standard.

The plan recommendation therefore is that the South Fork of the Payette River be nominated for study as a recreational component in the Wild and Scenic Rivers System.

This recommendation recognizes the existing limitation of the resource and sets the standard for management of the public lands in the corridor. If Congress designates the South Fork of the Payette River as a study river, and the study eventually leads to designation as a component of the Wild and Scenic Rivers System the same management philosophy would prevail as during the interim period.

Since the BLM is not a principal land management agency on the North Fork of the Payette River, no recommendation regarding this river segment is made.

ORVs

Off-Road Vehicle recreation activities will continue to be provided for on public lands. Six specific areas will be ORV play areas or cycle parks. Off-road vehicle use in the resource area will be open (unrestricted) on 257,623 acres (53%), limited to designated or existing roads and trails on 227,895 acres (47%), and closed on 1,948 acres (less than 1%).

Rationale

The primary soil types in the Cascade Resource Area include granitics, basalts and sediments. Within each of these major soil types certain conditions exist that qualify areas in the high erosion category, with slope the major factor affecting the erosion capability.

It is felt that basalts, even those in the high erosion capability category, appear to be resilient to use by off-road vehicles. These areas have been designated as open to off-road vehicles recognizing that topographic and vegetation would drastically limit use in some areas. Where steep terrain and heavy vegetation occurs de-facto closures and limitations actually exist.

The sediments and granitic soil types are both susceptible to damage by off-road vehicles. These classes have been designated as limited to off-road vehicles again recognizing that terrain and vegetative factors would close certain areas to off-road use.

There are a few exceptions to the limited use class in the Dewey, Parma, Little Gem and Clay Peak Cycle Park areas because of the need to provide for concentrated vehicle use close to population centers.

Designation of these open play areas helps to divert this use from other more fragile areas and provide the opportunity to concentrate facilities to accommodate use.

The areas identified as closed to off-road vehicle use are those with candidate or sensitive plant species, proposed/existing developed recreation sites, and a motorcycle park buffer zone.

Developed Site

Nineteen areas have been identified for various levels of recreation management. Facilities will be managed/developed at 15 specific sites within these areas (campgrounds, boat launch, trails, high ORV use areas).

Rationale

The plan identifies the need for designated sites primarily to accommodate increased demand on the important river systems (Weiser, Snake and Payette Rivers).

Because of the public land pattern in the Cascade Resource Area, most of the important recreation areas are located fairly close to population areas on lands administered by other state and federal agencies.

The recreationalist can utilize developed facilities provided by private enterprise, state parks or National Forest recreation sites while recreating on the adjacent public lands.

VRM

Visual resource classes in the resource area will be managed as follows: 81,000 acres as Class II; 383,466 acres as Class III; 23,000 acres as Class IV.

Rationale

The visual resource management system will be used to identify management proposals that may impact aesthetic values. The degree of alterations to the natural landscape would be guided by the criteria for the visual resource management classes in BLM Manual 8400.

Wilderness

The Box Creek WSA (111-91A) was not analyzed for wilderness in this document.

Rationale

The original wilderness inventory identified Box Creek as a potential study area because of its proximity to a National Forest roadless area. A separate EIS for areas less than 5,000 acres will evaluate this proposal for further consideration.

No new wilderness study areas were identified through the planning analysis as required by Section 202 of FLPMA.

Forest Management

Under the preferred alternative, 26,663 acres of suitable commercial forest lands would be managed for multiple use and sustained yield.

Rationale

The commercial forest land base has been reduced by 5,232 acres including 5,139 acres for TPCC withdrawals, 70 acres for a seed orchard and 23 acres for campground withdrawal.

The proposed annual harvest of 1 MMBF has been determined on the basis of demand for saw timber and the administrative capability to offer timber sales. This commercial forest land base has more potential on a sustained yield basis to provide for a greater timber harvest but only with intensive timber management and a greater investment in forest development.

Sales of firewood in the resource area would be continued on a limited basis because of the associated administrative costs and the fragmented, scattered parcel locations which makes location of tracts on the ground difficult.

Minerals Management

Leasables

Oil, gas and geothermal mineral exploration and development is open on 456,289 acres (94%) of the resource area.

Rationale

Since mineral leasing is a discretionary program it is felt that any special resource protection needed can be accommodated by either not offering leases or mitigation in lease agreements. Therefore, it has not been necessary to close or restrict areas to lease consideration. Site specific evaluation would be made with all lease proposals.

Locatables

Exploration and/or development for gold, silver, lead, zinc, gypsum, diatomite, etc. in the resource area is open on 456,281 acres (94%).

Rationale

With the exception of existing withdrawals administered by other agencies there are no additional withdrawal proposals in the Cascade Resource Management Plan.

The surface management regulations at 43 CFR 3809 provide management the opportunity to protect resource values from undue degradation during mining exploration and development.

Salables

Sands, gravels and other salable minerals would be made available from three material sites and 16 free use sites.

Rationale

The plan recognizes a continuing demand for mineral materials and the policy to make these materials available where consistent with protection of other resource values.

The procedure for salables allows for protection of resource values through the sale agreement and for adequate site rehabilitation after the materials have been removed.

Paleontologic Resource Management

Paleontologic resources will be managed under current district guidelines.

Rationale

Prior to any action that might effect paleontologic resources the area would be evaluated for the existence of these values. Mitigation to protect these resources would be part of any proposals that might impair important values.

Cultural Resource Management

Nine sites will be protected through special designation and management.

Rationale

The preferred alternative identifies and provides protection for cultural resource values in accordance with existing laws, regulations and agreements with the State Historic Preservation Office (SHPO).

Eight of the sites will be nominated for consideration on the National Register of Historic Places. One site is already listed.

Standard operating conditions and cultural site clearance procedures would be applied prior to project authorization and during the development process.

Fire Control Management

With the exception of identified prescribed burn areas, full fire suppression policy will apply to the resource area.

Rationale

Because of the resource values, soil erosion capability and proximity of public lands to cities, towns and private residences, full suppression efforts would be applied to all wildfires in the Cascade Resource Area. The only exception to full suppression would be for specific site locations identified as having potential for prescribed burning practices.

Provisions would be made to recognize resource values in planning prescribed burns to meet the objectives of all resource programs. Wildfire

rehabilitation efforts would be planned with other resource value objectives in mind.

Special Designation

Areas/Sites

Special designations include the following; 6 Research Natural Areas, 9 National Register of Historic Places, 3 Special Recreation Management Areas, 2 Extensive Recreation Management Areas, 1 Wild and Scenic River, 3 Areas of Critical Environmental Concern, 6 ORV play areas/parks, 3 Campgrounds, 3 Boat Launch Sites, 1 Picnic Site and 1 Interpretive Trail.

Rationale

In addition to the special designation mentioned under the threatened/endangered plant species section (research natural areas) and cultural resource management section (potential National Register sites), three areas qualify for special designation as Areas of Critical Environmental Concern (ACEC). These areas possess important resource values that are threatened or could be damaged by incompatible uses. The ACEC designation would serve to identify these areas as requiring special management attention. Special management is needed to maintain or improve existing resource condition.

No action to withdraw the areas from activities such as minerals, land transfer or agricultural development is deemed necessary. The regulations for leasable minerals and the surface management regulations for locatables would be adequate. The identification of the areas for retention in public ownership would prevent transfer of the lands under the various land laws. Disposal of all or portions of these areas would be allowed under the General Mining Law but would be unlikely due to low mineral potential.

MULTIPLE USE AND TRANSFER CLASSES

Management intensities for lands in the Resource Area are assigned to one of the following multiple use or transfer classes: moderate use class, limited use class, intensive use class, or transfer class.

Multiple use and transfer classes serve two purposes in this plan. The first is to describe overall resource opportunities and constraints by indicating what level of resource production and use is appropriate, what intensity of management is needed, whether there are sensitive and significant resources which must be protected, and whether BLM would transfer public lands from its jurisdiction. The second is to provide a basis for developing specific resource management objectives and actions for each multiple use area with general purpose and policy statements.

Prior to undertaking or approving any proposed resource management action on public lands in the Resource Area, BLM will ensure that such action is consistent with the purposes and policies of the multiple use or transfer class or classes involved and that adequate public involvement is obtained.

Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. A description of these classes and their purposes, policies and the management areas' goals and guidelines are as follows:

Moderate Use Class

The purpose of a moderate use class is to delineate public lands which are suitable for a wide variety of existing and potential use.

The general policies for managing a moderate use class are to provide for the production and use of forage, timber, minerals and energy, other consumptive resources, and recreation while maintaining or enhancing natural systems. These areas will be managed for a moderate intensity of use. These areas will generally be available for production and use of consumptive resources, subject to BLM standard operating procedures and other controls as needed. Sensitive and significant resource values, however, will be protected consistent with federal and state law.

Public lands in a moderate use class are to be retained in federal ownership. Management areas covered by the moderate use class and their goals and guidelines are as follows:

M-1 General Rangeland Management Area

Description: Consists primarily of grassland and shrubland with minor inclusions of forest. It includes wet meadows, lands adjacent to perennial and intermittent streams, ponds, bogs, marshes, seeps, and springs, wildlife and fisheries habitat (including crucial habitat). It also includes lands for visual and recreational enjoyment, watershed and water quality protection, dry parks, and open grassland and shrubland varying in size from a few to thousands of acres. These lands provide wildlife, wild horse and livestock forage.

Goals and Guidelines: Emphasis will be on maintaining or enhancing forage production for livestock, wild horses, and wildlife while maintaining site productivity, water quality, and stream stability and providing for other uses. Utility ROW development will be allowed. Public lands within this area will be retained. ORV recreation use will be designated as limited, open or closed depending on specific situations in this area. Range management practices will include special measures to protect riparian values. Mineral activities will be fully allowed.

M-2 General Forest Management Area

Description: Consists of commercial forest lands of varying physical environments classified as suitable for sustained yield timber management through Timber Production Capability Classification (TPCC). It also includes unsuitable commercial forest land as well as woodland withdrawn from timber management as a result of TPCC Classification. These areas may include cliffs, caves, rock outcrops, talus, and mature stands of timber growing on sites with severe limitations.

Goals and Guidelines: Emphasis will be on managing timber to maintain healthy stands, optimize timber growing potential, and regulate sustained timber production while maintaining site productivity, water quality, stream stability, and unique features for wildlife habitat, and providing for other uses. Livestock grazing generally will continue where use currently exists. Utility ROWs development will be allowed. A broad range of timber production activities will be permitted. Timber and range management practices will include special measures to protect riparian and other resource values found in this area. Public lands within this area will be retained in public ownership. ORV recreation use will be designated as limited, open or closed depending on specific situations in the area. Mineral activity will be fully allowed.

Intensive Use/Development Class

The purpose of an intensive use/development class is to delineate areas suitable for large scale or intensive use and development.

The general policies for managing an intensive use/development class are to provide for existing and projected demands for large scale or intensive use and development. These areas will be managed for a high intensity of use. These areas will be reserved for major or high density recreation sites or facilities, ORV intensive use areas, large scale or high intensive mineral or energy extraction operations, military use areas, or major utility installations. Because of the potential for conflict with other uses in these areas, some uses may not be permitted. Protection of sensitive and significant resources, however, will be ensured consistent with federal and state law. Public lands in an intensive use/development class will be retained in federal ownership but would be subject to federal mining laws governing patent unless withdrawn from mineral entry by the Secretary of Interior or by Congressional action.

I-1 Mineral Production Area

Description: Consists of lands for active or recently active mineral extraction and processing operations and the immediate surrounding vicinity.

Goals and Guidelines: Emphasis will be on providing for mineral production while protecting important wildlife values, restoring water quality and rehabilitating site productivity and stream stabilization through reclamation. Livestock grazing will not be permitted in areas where conflicts would exist. Utility ROW development will be allowed. Timber management activities will be unlikely. These lands generally will remain in public ownership unless mineral values warrant patenting. ORV recreation use will be limited or closed.

I-2 Developed Recreation Area

Description: Consists of existing and potential recreation use areas that provide developed, minimal, or no facilities to support high density recreation activities.

Goals and Guidelines: Emphasis will be on maintaining and enhancing recreation sites while maintaining water quality, stream stability and

important wildlife values. Livestock grazing may be permitted. Utility ROW development generally will not be permitted. Timber management activities will be limited to sanitation or salvage and will occur only when timber sales are scheduled for adjoining lands or when needed to meet other management goals for the area or if a safety hazard exists. Timber, range, and recreation management practices will include special measures to protect riparian values. Public lands within this area will remain in public ownership. ORV recreation use generally will be open for designated ORV areas but may be limited or closed at other developed sites.

Limited Use Class

The purpose of a limited use class is to delineate public lands where strict environmental controls are required to protect sensitive and significant resources.

The general policies for managing a limited use class are to fully protect and enhance sensitive and significant resources, while providing for other compatible uses. These areas will be managed for relatively low intensities of use and with strict environmental controls to protect sensitive and significant values. A limited use class may be closed to or contain restrictions on ORV use, mineral and energy exploration and development, forest management practices, location of utility ROWs and installations, livestock grazing, or any other potentially conflicting use. Public lands in a limited use class will be retained in public ownership.

L-1 Historical, Cultural or Paleontologic Sites/Areas

Description: Consists of scattered sites on BLM lands that are of historic, cultural or paleontologic significance.

Goals and Guidelines: Emphasis will be on protection of these values. Livestock grazing generally may be permitted where established. Utility ROW development generally will not be permitted. Timber management activities will be prohibited on those sites added to the National Register of Historic Places. Withdrawal from mineral entry may be sought and limitations on other mineral operations may be imposed. Public lands within these areas will remain in public ownership. ORV recreation use may be either limited or closed depending on the values needing protection.

L-2 Special Management Areas

Description: Areas distinguished by special, unique, or natural characteristics which require some form of special management. Designations include Areas of Critical Environmental Concern (ACEC), Research Natural Areas, Special Recreation Management Areas, Wild and Scenic River, and Wild Horse Herd Areas.

Goals and Guidelines: Emphasis will be on maintaining the special, unique, or natural characteristics of each area while providing opportunities for dispersed recreation, research, observation, study, environmental education, and interpretation. Livestock grazing may be permitted but in some cases adjusted where already established. Utility ROW development generally will not be permitted. Timber management activities

will be allowed if consistent with site-specific management goals. Withdrawal from mineral entry and other limitations may be sought. Public lands in these areas will remain in public ownership. ORV recreation use will be open, limited or closed depending on the management objectives for the specific sites.

Transfer Class

The purpose of a transfer class is to delineate public lands available for transfer out of federal ownership.

A transfer class is the only class in which public lands may be transferred out of federal ownership under this plan. Public lands declared eligible for transfer by their inclusion in this category are subject to detailed consideration prior to the final decision regarding transfer. Transfer classes are delineated in response to specific demands and needs identified during the planning process, such as agricultural development, community expansion, and other transfers, including transfers to the State of Idaho. Transfer classes will be managed on a custodial basis until transferred from federal jurisdiction. New public investments in these lands will generally be kept to a minimum.

Categories for Transfer

Lands available for transfer will be assigned to one of four categories. These categories are:

T-1: Sale Only - These lands may be designated for:

- Direct Sale - one party pay fair market value,
- Competitive Sale - open bid with highest bidder awarded offered lands,
or
- Modified Competitive - adjacent landowner can meet highest bid and get offered lands.

T-2: Sale or Exchange - Same as T-1 or a land trade with another public agency or a private landowner.

T-3: Exchange Only - These lands generally are offered only if equal or better lands can be received by the BLM to meet various program objectives, i.e., wildlife habitat, recreational access.

T-4: Desert Land Entry (DLE) - These lands may be transferred through Desert Land Application for agricultural development.

T-5: Commercial Forest Lands - These lands may only be considered for the exchange of land (State or private) containing resource values of national significance such as, within boundaries of wilderness areas, wild and scenic rivers, historic, cultural or paleontologic areas, endangered species habitat or crucial wildlife habitat that can be managed by the BLM or for other commercial forest lands of equal value that would improve BLM management.

Retention Areas

All public lands not identified in a transfer category will be retained in public ownership and managed under one of the three multiple use categories. Those lands determined to be unsuitable for disposal, after detailed consideration, will be retained. Requests to consider lands for possible transfer, after plan approval, will be evaluated through the amendment procedure in accordance with the Code of Federal Regulations (43 CFR 1610.5-5) and BLM Manual 1616.22 and 1617.4A or B.

DESCRIPTION OF PLANNING AREA

The Cascade Resource Area is located within the administrative boundary of the Boise District. It is situated in west-central Idaho. The Resource Area is defined by the Snake River on the west and southwest; the Boise and Payette National Forest boundaries on the east; the northern line of Adams County on the north; and the Boise River-New York and Mora Canals - Ada/Canyon County line on the southeast.

The Resource Area encompasses a land base of approximately 2.77 million acres. This area includes all or portions of Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties. Land ownership consists of public lands (487,000 acres), State of Idaho (183,000 acres) and private (2.10 million acres).

In general, the public lands consist of scattered, unconsolidated tracts intermingled with the state and private lands. The Bureau of Land Management administers approximately 456,466 acres of the public lands. The remaining 31,000 acres are managed cooperatively with other federal agencies such as the Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey and Department of Defense.

The Cascade Resource Area is the most heavily populated in the Boise District, if not the state. According to the "1980 Census of Population," issued in June 1983, approximately 305,000 people or 32% of Idaho's population reside in the Resource Area. The majority of these people are located within the Treasure Valley in the Cities of Boise (the state's capital and largest city), Nampa and Caldwell. Other cities located in the Resource Area include Emmett, Payette, Weiser, McCall, Cascade, and Horseshoe Bend, Council and Cambridge.

The detailed environmental characteristics of the Resource Area are described in the Analysis of Management Situation documents available for review at the Boise District Office.

PREFERRED ALTERNATIVE E

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use.

A portion of the Payette River would be recommended for study for possible addition to the National Wild and Scenic River System.

The planning decisions for recreation and wildlife in the Boise Front and Black Canyon MFPs would be unchanged and protection of the habitat area for long-billed curlews in the Black Canyon area would be maintained.

Areas of special interest or fragile environments would be given special designation such as research natural areas and ACECs.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|----------------|-----------------|---------------|-----------------|
| <u>347,956</u> | acres Moderate, | <u>3,399</u> | acres Intensive |
| <u>118,587</u> | acres Limited, | <u>17,524</u> | acres Transfer |

Livestock Resources

Objectives

Manage 449,059 acres of rangeland to provide forage for livestock and wild horses.

Livestock AUMs: 72,571 Active Pref., 66,424 Licensed
66,257 Initial, 68,000 5 yr., 70,536 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
West Crane Creek 12 Initial, 0 20 yr.

Wild Horses-AUMs: 20 yrs.: 4 Mile 240; West Crane 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:

5 yrs - 5,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
20 yrs - 18,279 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 60 mi. fence, 66 reservoirs/wells/springs, 15 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer but under temporary nonrenewable basis until lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Note: For analysis purposes for livestock use levels (AUMs), it was assumed that only the current land transfer applications being processed would be completed within the next 5 years and that no other land transfers would occur within the next 5 years. Consequently the 5-year forage level for livestock in the preferred alternative is not comparable with the 5-year forage level for livestock in Alternatives A, B, C, or D since it was assumed that all land transfers in these alternatives would be completed at the end of 5 years. See Appendix G for further information.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect Federal candidate and sensitive plants.

Protect and manage 12 specific sites containing Federal Category II candidate and sensitive plants.

Improve general condition on 32% of all fair and 11% of all good condition rangeland.

Change or improve condition on 31% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in these areas known to contain candidate or sensitive plants.

Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and manage 12 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW Avoidance | | | ORV Use | | |
|-----------------------------------|----------------------|-------|------------------|------------|----------|---------------|------|-----|---------|-----|-----|
| | | | Locat-ables | Leaseables | | 1/ | | | 2/ | | |
| | | | With-drawal | Clo-sed | No Surf. | O | Surf | Sub | O | L | C |
| 1. Lost Basin Grassland <u>3/</u> | RNA | 65 | 0 | 0 | 65 | 0 | 65 | 65 | 0 | 0 | 65 |
| 2. Rebecca Sandhill <u>3/</u> | RNA | 410 | 0 | 0 | 410 | 0 | 410 | 410 | 0 | 0 | 410 |
| 3. Sand Hollow <u>4/</u> | --- | 500 | 0 | 0 | 500 | 0 | 500 | 500 | 0 | 500 | 0 |
| 4. Summer Creek <u>4/</u> | RNA | 200 | 0 | 0 | 200 | 0 | 200 | 200 | 0 | 0 | 200 |
| 5. Peraphyllum Rock | RNA | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 6. Beacon Hill | --- | 20 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 20 | 0 |
| 7. Sagebrush Hill | --- | 10 | 0 | 0 | 10 | 0 | 10 | 10 | 0 | 0 | 10 |
| 8. Buckwheat Flats | RNA | 60 | 0 | 0 | 60 | 0 | 60 | 60 | 0 | 0 | 60 |
| 9. 4th July Meadow | --- | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 0 | 0 | 100 |
| 10. Sand Capped Knob | --- | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 11. Goodrich Creek <u>3/</u> | RNA | 440 | 0 | 0 | 440 | 0 | 440 | 440 | 0 | 0 | 440 |
| 12. Pearl | --- | 400 | 0 | 0 | 400 | 0 | 400 | 400 | 0 | 400 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

2/ 0 = Open, L = Limited, C = Closed.

3/ Exclude or limit livestock grazing.

4/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known. Prepare six Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 185,860 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 22,700 acres of Columbian sharp-tailed grouse habitats to improve populations of these threatened/sensitive species.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|---------------------------|-----------------------|
| Wildlife Unit Months: | <u>7,124</u> Elk, | <u>44,612</u> Deer, | <u>1,800</u> Antelope |
| Expected Population: | <u>191</u> yrlong Elk, | <u>961</u> yrlong Deer, | <u>175</u> yrlong |
| | <u>1,208</u> winter Elk, | <u>8,270</u> winter Deer, | Antelope |

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding,
8,295 acres Burn, Disc & Seed,
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzlers

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 16 stream miles of riparian habitat. Continue present management on 102 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 66 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Establish riparian pastures, grazing systems, and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 11 mi. fencing, 11 mi. instream work
7 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,524 acres of public lands (563 acres through sale (T1) and 10,107 acres through sale or exchange (T2) and 6,374 acres through exchange (T3), and 480 acres through DLE (T4)). Retain 470,182 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notification to livestock permittees once the final decision to transfer has been made.

Recreation Resources

Objectives

Provide or enhance recreation use at 19 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreational category).

Actions

ORV recreation activity is open on 257,623 acres, limited (to existing or designated roads and trails) on 227,895 acres and closed on 1,948 acres.

Manage 11,084 acres of public lands recommended for transfer as limited to designated or existing roads and trails and 6,160 acres as open for ORV recreation, until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Designate and manage 19 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|------------------------------|----------------------|-----------------------|------------------|-----------------|------------|-----------------------------|----------|------|----------------|--------|-----|
| | | | Locat- ables | Lease- ables | No Surf | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
| | | | With- drawal | Clo- sed | | 0 | Surf | Sub. | 0 | L | C |
| 1. Cascade Uplands 3/ | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 254,743 | 74,799 | 0 |
| 2. Weiser River Launch | Boat | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak | Cycle Park | 948 | 0 | 0 | 948 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow 4/ Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39,779 | 0 |
| 5. Steck | Campground 5/ | 11 | 0 | 0 | 11 | 11 | 11 | 0 | 0 | 0 | 11 |
| 6. Weiser Dunes | Play Area | 200 | 0 | 0 | 0 | 0 | 200 | 0 | 200 | 0 | 0 |
| 7. Snake River Launch | Boat | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 10 | 0 |
| 8. Payette River 6/ Corridor | SRMA/WSR | 19,000/ (2,600/ 8 mi) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,984 | 0 |
| 9. North Fork 5/ | Campground | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 0 | 10 |
| 10. Garden Valley | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 11. South Fork 5/ | Campground | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 3 |
| 12. Chief Parrish | Picnic Site | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 13. Boise Front 7/ | SRMA/ACEC | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 14. Hulls Gulch | Interpret. Trail | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 |
| 15. Treasure Valley 8/ | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,780 | 0 |
| 16. Little Gem | Cycle Park | 3,000 | 0 | 0 | 0 | 0 | 3,000 9/ | 0 | 2,100 | 900 | 0 |
| 17. Dewey | Play Area | 30 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 0 | 0 |
| 18. Parma | Play Area | 10 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 |
| 19. Pickles Butte | Play Area | 180 | 0 | 0 | 0 | 0 | 180 | 0 | 180 | 0 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

2/ 0 = Open; L = Limited; C = Closed.

3/ Specific constraints covered under Weiser River and Clay Peak.

4/ Specific constraints covered under Steck, Weiser Dunes and Snake River.

5/ Exclude or limit livestock grazing.

6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.

7/ Specific constraints covered under Hulls Gulch.

8/ Specific constraints covered under Little Gem, Dewey, Parma and Pickles Butte.

9/ Except for electrical transmission towers in existing right-of-way.

Projects: Water and/or sanitary facilities - 7, launch ramp - 1,
access - 7

Activity Plans: RAMPS for Oxbow-Brownlee, Boise Front and Payette River
Corridor.

Cultural Resources

Objectives

Protect, through special designation and management, areas with
significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and
manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

| Sites | NR 1/ Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|----------------------------|----------------|------------------|--------|------------|------------|----|-------------------------|---------|-----|------------|
| | | Locatables | | No Surf | Leaseables | | Avoidance (acres) 5/ | 5/ | | (acres) 3/ |
| | | Withdrawal | Closed | | | | | O | L | |
| 1. Placerville Townsite | 8 4/ | 8 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 386 | 0 |
| 7. Centerville | 516 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 516 | 0 |
| 8. Pioneerville | 581 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 581 | 0 |
| 9. Mineral | 429 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 429 | 0 |

1/ National Register of Historic Places.

2/ Acreage to be determined by National Register nomination process.

3/ O = Open, L = Limited, C = Closed.

4/ National Register of Historic Places (existing).

5/ O = Overhead; S = Surface; Sub = Subsurface.

Projects: 5 mi. fencing

Activity Plans: CRMP (9)

Forest Resources

Objectives

Manage 26,663 acres of suitable commercial forest land for timber
management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,232 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal, 70 acres for seed withdrawal, and 23 acres for campground withdrawal.

Provide an annual harvest of 1.0 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 40 mi. of forest access road (2 miles annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 100-400 acres annually.

Mineral Resources

Objectives

Make 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leaseable mineral exploration and development.

Continue making available saleable minerals from three material sale sites and 16 free-use sites as needed.

Actions

| Leaseables (acres) | | | Locatables (acres) | | Salables (acres) | |
|--------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 456,289 | 31,177 | 2,335 | 456,281 | 31,185 | 95 | 0 |

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

This plan recommends ACEC designation for three areas which met the criteria (of relevance and importance) to be considered for ACEC designations (Boise Front Area; Columbian Sharp-tail Grouse Habitat Area; and the Black Canyon Long-billed Curlew Management Area). The ACECs are shown on Map 2-3. The following summarizes the description and special requirements for the three ACECs recommended in the RMP. Additional information are available at the Boise District Office, BLM.

Name: Boise Front Area of Critical Environmental Concern

Purpose

The purpose for designating 12,000 acres of the Boise Front as an ACEC is to focus attention and identify management direction on this important natural resource. Management objectives are to protect and enhance the watershed resource, quality of wildlife habitat, variety of recreation opportunities, and scenic values.

Site Description

The Boise Front ACEC would encompass 12,000 acres in the hills and mountains lying immediately north and east of Boise, Idaho. The 12,000 acres are situated in a land ownership pattern with adjacent Forest Service, Idaho Fish and Game, State Department of Public Lands, and private lands. Elevations range from 3,200 feet at Lucky Peak reservoir to 5,680 feet near Lucky Peak. Topography is generally steep. A major portion of the land area contains slopes of 20 to 60 percent.

Soils in the area are formed in deeply weathered granite of the Idaho Batholith and are highly erosive and easily disturbed when dry or saturated.

Present vegetation includes cheatgrass and other annuals at the lower elevations, sagebrush and bitterbrush at mid elevations, and scattered stands of Douglas fir and ponderosa pine at higher elevations. Five major drainages usually provide streamflows throughout the year. Other stream courses are generally dry during the summer months with spring snowmelt and rainstorms contributing to seasonal streamflows. The major drainages and many smaller ones support riparian vegetation. Livestock use includes approximately 325 cattle in a rest/rotation grazing system managed by the Idaho Department of Fish and Game. Several bands of sheep trail across the area in spring and fall.

In 1959 after a fire eliminated much of the vegetative cover, two separate storms caused serious flooding and sediment damage to the northeast portion of the City of Boise. Following a costly cleanup, extensive watershed rehabilitation work was done by several agencies in a joint effort to stabilize the vulnerable resource. The terraces constructed as part of that effort are still visible from the City of Boise and vicinity as a reminder of the areas sensitivity to disturbance and forces of nature.

Resource Values

The Boise Front functions as an important ground water recharge area. Snow melt and rain waters enter the soil and percolate down through the granitic soils, faults and fractures and eventually create groundwater reservoirs. These subsurface reservoirs release water at numerous springs and support the perennial streams and riparian vegetation. Much of the subsurface flows accumulate in groundwater reservoirs which are available for Boise Valley users. The City of Boise is a major user of this groundwater and operates several groundwater wells for municipal use including geothermal heating.

The Boise Front is a crucial winter range for approximately 4,000 mule deer. The Highland Valley and Shaw Mountain roads are currently closed to vehicles from December 15 to April 1 to protect this herd. Upland game birds (quail, dove, chukar and Hungarian partridge), numerous small mammals, reptiles and non game birds are also found in the area. Two candidate (Federal Category II) plants, Aaseae's onion (Allium aseae) and Mulford milkvetch (Astragalus mulfordeae) have been identified in the area.

Recreation use on the Boise Front includes ORV activities, hunting, hiking, horseback riding, and interpretive uses along the Halls Gulch National Recreation Trail.

The Boise Front is a scenic backdrop for the City of Boise and surrounding area. Although there are several powerlines traversing the area, they are generally not noticeable from a distance. More noticeable are the roads and trails, many of which have been established through unrestricted ORV use. It is currently managed as a Class II visual resource.

Cause for Concern

The combination of steep slopes and highly erodible granitic soils make the area extremely sensitive to changes in the vegetative community through surface disturbing activities. Disturbance of the vegetative community can lead to rill and gully erosion which are now evident on the Boise Front. Much of the serious rill and gully erosion has been attributed to disturbance caused by off road vehicle use. This erosion can reduce the function and value of the area as a watershed and groundwater recharge area. Springs and riparian vegetation may also be reduced. The current erosion problems are increasing and the ability of the area to fully function in its capacity as a watershed is threatened.

Surface disturbing activities which can lead to undesirable vegetative changes and erosion include unrestricted motorized and nonmotorized vehicle use, road construction and maintenance, mineral extraction, certain rights-of-way, fire occurrence, and suppression activities.

The scars from severe erosion can also reduce the attractiveness of the area as a scenic backdrop for viewers from the Boise vicinity and can reduce the quality of recreation activities.

Vehicle use and human disturbance during the winter months can reduce the effectiveness of winter habitat for deer populations by adding stress during a critical time.

Management Guidelines

Resource Use Limitations

The following resource use limitations will apply to the Boise Front ACEC to protect resource values:

1. Motorized and nonmotorized vehicle use will be limited to designated roads and trails.

2. The Highland Valley and Shaw Mountain roads will be closed to motorized and nonmotorized vehicle use from December 15 to April 1.
3. The upper portion of the 8th Street Road will be closed to 4-wheeled vehicles during the wet winter months.
4. The area will be closed to disposal of mineral materials under the Materials Act of 1947, as amended (Alternative B only).
5. The area will be managed to conform to Class II Visual Resource Management Guidelines.
6. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

The following activities will receive management emphasis to further protect resource values:

1. Closure and rehabilitation of certain roads and trails.
2. Maintenance and reconstruction of existing roads and trails.
3. Restriction of future rights-of-way to insure minimal erosion and visual intrusion.
4. Full fire suppression.
5. Rehabilitation of burned areas.
6. Installation of water control structures to reduce erosion where needed.

Name: Columbian Sharp-tailed Grouse Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating 4,200 acres as an ACEC is to intensify habitat management for one of the last remaining populations of Columbian sharp-tailed grouse in western Idaho and eastern Oregon. The basic management objectives will be to improve, protect and enhance the quality of the habitat for this sensitive species.

Site Description

This ACEC would be located approximately 16 miles north of Weiser, Idaho on the south side of Hitt Mountain with USFS land, State land and private lands on the north, east and south.

It is bordered on the west by Mann Creek while Sage Creek and Deer Creek transect the area.

Topography is mostly rolling hills with some steep slopes adjacent to Mann and Sage Creeks. Elevation varies from 3,200 feet to 4,000 feet. Soils are mixed and it is not uncommon to find pockets of loamy soil interspersed in shallow rocky soils.

The area presents a mosaic of vegetation types corresponding to the various soils. Vegetation associations include big sagebrush/grasses and mountain shrub patches with aspen, serviceberry, chokecherry, bittercherry and snowbrush shrubs, riparian zones with willow, rose and hawthorne shrubs with the northern areas of ponderosa pine with some Douglas-fir.

Resource Values

In addition to Columbian sharp-tailed grouse (Pediocetes phasianellus columbianus), the area contains important spring, fall and summer habitat for mule deer which are common in the area. Concentrations of migrating mule deer use the area during the spring and fall. It is also important spring and fall elk range. The area has a rich diversity of wildlife. It supports a variety of mammals from coyotes to deer mice. Approximately 180 different species of birds have been observed on the area.

Causes for Concern

Columbian sharp-tailed grouse were once abundant and widespread throughout the northwest. This species has disappeared from most of its former range and it is now extinct in California, Oregon and Nevada and reduced to remnant populations over the remainder of its range.

Currently, remaining populations in Idaho are small and disjunct. In western Idaho, populations are extremely rare and are limited to Washington and Adams Counties. The largest known population in western Idaho is found in the vicinity of this ACEC. There are four known dancing grounds in the area and the fluctuating population numbers approximately 200 birds.

The Columbian sharp-tailed grouse has been designated as a "Species of Special Concern" by the Idaho Department of Fish and Game (IDFG) and as a "Sensitive Species" by the U.S. Fish and Wildlife Service and Bureau of Land Management (BLM). BLM policy is to maintain or increase current population levels of sensitive species through habitat protection and enhancement.

Management Guidelines

Resource Use Limitations

1. Motorized vehicle use will be limited to designated roads and trails.
2. Livestock grazing will be adjusted to allow the range to reach and maintain optimal habitat condition.
3. Surface occupancy for all oil and gas, and geothermal leases will be determined on a site specific basis.
4. Seasonal occupancy stipulations will be applied on all oil and gas and geothermal leases.

5. Rights-of-ways construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.
6. No permanent new roads will be allowed in the area.
7. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Develop a fully comprehensive habitat management plan for the area.
2. Fire rehabilitation and vegetative manipulation will be conducted with native species emphasized.
3. Maintenance of the bordering fences to manage livestock movement will be conducted annually.
4. Pursue acquisition of key habitat areas on State and private lands.
5. Place high fire suppression priority on the area.

Name: Long-Billed Curlew Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating approximately 61,000 acres as an ACEC is to identify the area as crucial nesting habitat for Long-billed Curlew (Numenius americanus), a federally protected migratory species. The main management objective will be to maintain nesting habitat for the 1,000 curlew pairs that nest and raise their young in the area.

Site Description

The area is a low, rolling upland lying between the Boise, Payette and Snake River valleys. The area is characterized by choppy rolling topography which supports a semi-desert type vegetative community. Average rainfall is approximately 11 inches per year with most of the moisture falling from November to June.

The native habitat has been highly modified over the years. Historically, the area was a sagebrush/bunchgrass vegetation community. Livestock grazing, frequent wildfire and the invasion of exotic annual grasses have largely eliminated the shrubs and perennial grasses.

In general, there are four cover types: 1) annual rangeland, 2) sagebrush, 3) crested wheatgrass, and 4) irrigated agriculture. The annual rangeland type is the key habitat for nesting curlews.

Resource Values

There are eight livestock operators that utilize the rangelands in the area. They graze both cattle and sheep on approximately 80,000 acres of state, private, and public lands. Grazing periods occur throughout the year with some operators grazing at various seasons of the year.

Recreation use on the area is divided into four areas. The area east of Little Freezeout is used heavily by horse enthusiasts. In the past, some endurance rides have been held in this area. The area is also used by upland bird hunters in the fall. Limited ORV use also takes place. The area from Little Freezeout west to Sand Hollow is used by ORV enthusiasts. The Dewey ORV Park is located in this area. There is also some use by equestrians and upland bird hunters in the fall. The area west of Sand Hollow is heavily used by upland game hunters. There has also been some dog trials held in this area. Equestrians use the area while ORV use is heavy in the southwest corner of the area and a motorcross track is located in the northwest corner of the area. The areas north of the Black Canyon and west of the Sand Hollow freeway exits have dense populations of ground squirrels and are used by squirrel hunters in the spring.

Cause for Concern

Each year, Long-billed Curlew migrate into the area arriving about the third week in March. This large shore bird nests and raises its young in the annual grass habitat. The area supports about 1,000-nesting pairs, the largest nesting population in the western United States. Research on the population and habitat relationships was conducted in this area from 1977 to 1979. This research provided the base line information to manage this significant population.

A substantial decline in population and distribution of this species in the United States prompted its classification as a "Sensitive Species," by both the BLM and U.S. Fish and Wildlife Service. The Idaho Department of Fish and Game has designated this bird as a "Species of Special Concern." These classifications are an "early warning" that a species may be in trouble and if declines continue that official listing with maximum protection under the Endangered Species Act may be necessary. A habitat management plan was developed to assist in the conservation of crucial curlew habitat.

Management Guidelines

Resource Use Limitations

1. Motor vehicle use will be limited to designated roads and trails.
2. Seasonal occupancy stipulations will apply on all oil and gas and geothermal leases.
3. Rights-of-way construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.
4. Road construction will be limited and evaluated on a site specific basis.

5. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Maintain sufficient good curlew habitat to support 1,000 nesting pairs during the breeding season.
2. Pursue the acquisition of key habitat of state and private lands through land exchange.
3. Enforce the ORV use limitations during the curlew nesting and brood-rearing periods.
4. Encourage intensive grazing systems that would improve curlew habitat in areas where vegetation is too high and too dense.
5. Use controlled burns as a management tool to maintain and improve curlew habitat.
6. Give curlew habitat priority consideration in all range improvement projects.
7. Encourage domestic sheep use on the area.

RESOURCE MANAGEMENT GUIDELINES

The development of this plan and the implementation of the final decisions has been and will be guided by federal and state laws, federal rules and regulations, and cooperative and legal agreements. The following section describes the standard operating procedures, policies, and management guidelines which will be applicable regardless of which alternative plan (A, B, C, D, or E) is selected for implementation.

Public Land Management

The public lands will be planned and managed under the principles of multiple use and sustained yield as required by FLPMA and other principles as outlined in BLM planning regulations. Any valid use, occupancy, and development of the public lands, including, but not limited to those requiring rights-of-way, leases, and licenses will be considered, subject to applicable environmental review procedures, unless specifically excluded in the plan. In some areas, however, environmental values, hazards, or manageability considerations may require limitations on either the type or intensity of use, or both. Those limitations are identified in the plan's land use allocations and management objectives for specific areas within the public lands. BLM will include stipulations and special conditions as necessary in leases, licenses, and permits to ensure the protection and preservation of resources.

Lands

General

The public lands to be retained in Federal ownership will be managed by BLM according to the principles of multiple use and sustained yield. Those lands specifically identified in the plan as transfer areas will be managed on a custodial basis until transferred.

Public lands that are to be retained in federal ownership may be considered for Recreation and Public Purposes needs, private exchanges and state exchanges. Such action will follow amendment procedures as outlined in BLM Manual 1617.4.

Withdrawals

It is BLM policy to review all withdrawals on and classifications of public lands by October 20, 1991, and to eliminate all unnecessary withdrawals and classifications. Reviews will be made following the land use planning process and will consider the following:

1. For what purpose were the lands withdrawn?
2. Is that purpose still being served?
3. Are the lands suitable for return to the public domain (e.g., not contaminated land or "property" such as buildings)?

The environmental assessment or planning process will be followed to consider alternative methods such as rights-of-way or cooperative agreements for meeting the withdrawal/classification objectives.

Withdrawal modifications and extensions must provide for maximum possible multiple uses, with particular emphasis upon mineral exploration and development. When withdrawals are revoked, the lands continue to be in a retention category.

New withdrawals proposed will be handled on a case by case basis in accordance with Section 204 of the FLPMA, with full public participation.

Acquisitions

Lands to be acquired through exchange or purchase will be done in the furtherance of one or more of the resource programs including, but not limited to cultural, paleontologic, recreation, wildlife and soils.

Transfers

Transfer areas are those public lands identified through the planning process which are available for transfer from federal ownership. Transfer of public land within a transfer area may be accomplished by any means authorized by law. Specific transfer methods may also be specified. Final transfer from BLM jurisdiction, however, is subject to a decision by the

authorized officer, based on detailed analysis and such documentation as prescribed by law or regulation.

Lands may be acquired by BLM as authorized by law, but only within retention areas. Objectives for acquiring lands in connection with BLM programs are established in the RMP.

BLM will manage transfer areas until transfer of title occurs. Management actions will be taken as necessary to meet resource or user needs. Public investments in transfer areas will be kept to a minimum.

Land disposal actions are, primarily, accomplished under sale, agricultural entry, exchange, and Recreation and Public Purpose (R&PP) land laws. Miscellaneous transfers can also occur through Color of Title actions, airport conveyances, and State in lieu selections.

All disposals of public lands must be consistent with the planning requirements of FLPMA and must also be evaluated through the environmental assessment process as required by NEPA. Public notice will be given on each disposal action and each action may be protested or appealed.

A preliminary consideration in all disposal actions is to provide protection for existing rights, access, and future anticipated needs. This protection is provided for through the issuance of rights-of-way to existing users or reservations to the Federal government in areas of anticipated needs.

General considerations for the major types of disposal actions are discussed below:

Agricultural - Consideration for allowing the use of public lands for agricultural development under the Desert Land and Carey Acts generally fall into four steps. They are:

1. The lands must be identified for disposal through the land use planning process.
2. The lands must be desert in character and physically suited for agricultural development by irrigation.

The following criteria are used to determine the suitability classification of potential agricultural lands:

- a. If there is 60% or more SCS Classes I, II, or III ^{1/} soils in a 40-acre ^{2/} parcel, the parcel may be classified suitable for agricultural development. If there is more than 40% SCS Class IV or poorer soils in each 40-acre parcel, the entire parcel is unsuitable for classification.
- b. Cropland in Capability Classes II through V (particularly subclass "e") that has an average annual erosion rate of more than three times that at which soil forms (4-5 tons per acre per year on the average for deep soils, lower for shallower soils) will be found unsuitable.
- c. Any public lands containing known archaeological, paleontologic, or historical values determined to be unique or possibly significant will be found unsuitable for disposal pending further analysis.
- d. Any public lands where rare, endangered, threatened, or sensitive species of plants or animals are known to live (or nest) will be found unsuitable for disposal, unless mitigation is possible.
- e. Certain tracts of land identified for community needs such as landfills, gravel pits, sewage plants, schools, etc., will be found unsuitable for disposal for agriculture.
- f. Certain tracts of land identified as valuable for wildlife habitat will be found unsuitable for disposal. The guidelines and analysis contained in the Environmental Statement (Agricultural Development for Southwest Idaho, February, 1980, Appendix 1-1), will be used to select the wildlife leave areas.
- g. Public land that does not qualify for agricultural use or disposal under Desert Land Act or Carey Act because of other public purpose will be found unsuitable for disposal under these laws.
- h. Certain tracts of land identified as having agricultural limitations based on slope and/or flood plain management will be found unsuitable.

^{1/} A minimum of 50 frost-free days (growing season) will be acceptable as the criteria for SCS Capability Class III soils when small grains and alfalfa is the typical cash crop grown in the area. All other criteria for Class III soils as defined by the SCS in Idaho will apply.

^{2/} Although land can be legally described in very small increments, the Department of Interior has long followed the practice of requiring disposals of the public lands to conform to the smallest regular legal subdivision (40 acres) or lot and of treating minor subdivisions as indivisible for administrative purposes. The authority of the Department to impose such a restriction by regulation has been upheld by the courts.

3. Post Classification (Allowance or Rejection)

- a. An economic analysis must show a high likelihood that the lands can be farmed at a profit over a long term.
- b. Applicant must show a legal right to appropriate water including a permit to drill a well if part of the operation. Application that would contribute to the mining of groundwater will not be allowed.

4. Compliance

- a. The entryman must show compliance with cultivation, fund expenditure, irrigation system development, and publication requirements, and payment of required fees to obtain patent to the land.

The BLM will continue to work closely with the Idaho Department of Water Resources under terms of a cooperative agreement to process existing Desert Land Entry applications.

Public lands currently under DLE applications in RMP disposal category that are relinquished or rejected will revert to a retention category and will not be made available for further application for agricultural purposes but may be considered under a land exchange proposal.

Exchanges - Before an exchange can be consummated, the BLM must determine that the public interest will be well served by making the exchange as contemplated by Section 206 of FLPMA. Full consideration will be given to improved Federal land management and the needs of State and local publics through an evaluation of the needs for lands for economic development, community expansion, recreation areas or opportunities, food, fiber, minerals, and wildlife. Another consideration is that lands must be equal in value, or, if not equal, a cash payment not exceeding 25% of the total value of Federal lands may be made by the appropriate party to equalize the values. Any lands delineated for transfer in the exchange only category but not needed to consummate the exchange may be considered for other forms of transfer. The general criteria for exchange disposal is as follows:

1. Processing of exchanges is contingent upon receiving the requested funding in the benefitting activity (wildlife, recreation, range, etc.).
2. Exchanges will not be considered that would isolate any public lands.
3. Exchanges will not be considered that would dispose of significant cultural, paleontologic or recreation resources.
4. Exchanges will be considered only if they maintain the natural function of the floodplain.

Sales - Sales of public lands can be made upon consideration of the following criteria found in Section 203 of FLPMA:

1. Such parcel, because of its location or other characteristics, is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or
2. Such parcel was acquired for a specific purpose and is no longer required for that or any other Federal purpose; or
3. Disposal of such parcel will serve important public objectives, including but not limited to, expansion of communities and economic development which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values. These include, but are not limited to, wildlife, grazing, recreation, cultural, paleontologic, and scenic values which would be served by maintaining such parcel in Federal ownership.

Sales may be made through (1) competitive bidding, (2) modified competitive bidding wherein some individual(s) may be given the opportunity to match the high bid, and (3) direct sale wherein the tract is sold at fair market value to a predetermined buyer. All sales must be made at no less than fair market value as determined by the approved procedure (a BLM appraisal).

Land Use Authorizations

Land use permits under Section 302 of FLPMA may be used after trespass settlement as an interim management measure for resolving unauthorized use problems prior to a final land use/status determination, and for one time uses of short duration. Leases may be used as a longer term (5 to 10 years) interim management tool, particularly where future disposal or dedication to another particular land use is contemplated. The latter may allow for agricultural use on a site that may be needed in the future for communication purposes, materials source, or community expansion.

Land use permits (LUPs) for irrigated agricultural use of public land will be used sparingly and be restricted to resolve situations where other alternatives prove to be impractical, such as: 1) small areas of public land isolated between a farmed field and a canal, ditch, or road; and 2) renewal for an existing circular pivot already authorized by a LUP until the land is removed from agricultural production and rehabilitated or until the land is transferred from public ownership. In cases where a pivot must cross public land, the lands are to remain unfarmed and a LUP will be issued only for the crossing pivot.

Rights-of-way, under Title V of FLPMA, will be considered in the Cascade Resource Area except where specifically identified in the RMP for avoidance. Future locations for ROWs will be encouraged within or adjacent to existing ROWs as much as possible. New sites will be considered if there is a demonstrated need and the resource conflicts are low or can be mitigated.

Cooperative agreements are to be used with other Federal entities for uses which are not appropriately covered by a right-of-way or a withdrawal. Flood control and aquifer recharge areas may be most appropriately covered by cooperative agreements.

Airport leases are considered only when a definite need has been shown, supported by a specific development and management plan, and a showing of financial capability to carry out the project.

Each action would require a site-specific examination. An environmental assessment would be prepared on the proposal with special emphasis placed upon identification and mitigation of adverse effects upon resource values such as rare, endangered, threatened, or sensitive species, cultural or paleontologic resources, wetland/riparian zones, and flood plains.

Access

The Boise District will continue its ongoing program of identifying and obtaining BLM access across non-bureau lands where needed to accomplish bureau objectives.

Unauthorized Use

It is BLM policy to identify, abate, and prevent unauthorized use of public lands. Trespass settlement is geared to recover at least fair market value for the unauthorized use and to require rehabilitation of the land and resource damaged by the unauthorized action. Settlements may be made through administrative action or through civil or criminal court proceedings.

Soil erosion which occurs on public lands as a result of excess irrigation flows from private agricultural lands will be treated as a trespass in order to stop the erosion and to rehabilitate the damage to public land.

Soil, Water, and Air

Soils

Soils will be managed to maintain productivity and to minimize erosion.

Project level planning will consider the sensitivity of soil, water, and air resources in the affected area on a site specific basis. Stipulations will ensure project compatibility with soil, water, and air resource management. All construction of management facilities and land treatments will be designed to minimize adverse impacts to the soil, water, and air resources. Areas disturbed during project construction will be reseeded with a mixture of grasses, forbs, and shrubs when necessary.

Air

Under the Clean Air Act (as amended, 1977), BLM-administered lands were given Class II air quality classification, which allows moderate deterioration associated with moderate, well-controlled industrial and population growth. BLM will manage all public lands as Class II unless they are reclassified by the State as a result of the procedures prescribed in the Clean Air Act (as amended, 1977). Administrative actions on the public lands will comply with the air quality classifications for that specific area.

Water

A variety of methods may be employed to maintain, improve, protect, and restore watershed conditions. Priority will be given to meeting emergency watershed needs due to flooding, severe drought, or fire.

Water quality will be maintained or improved in accordance with State and Federal standards. State agencies will be consulted on proposed projects that may significantly affect water quality.

Facilities and structures designed to maintain or improve existing water sources, provide new water sources, control water level or flow characteristics, or maintain or improve water quality may be developed. BLM will work closely with the Idaho Department of Water Resources, Idaho Department of Health and Welfare, U.S. Army Corps of Engineers, and other local, state, and federal agencies to determine appropriate location and designs for such projects.

Management actions within floodplains and wetlands will include measures to preserve, protect, or restore their natural function of water storage and groundwater recharge.

Water rights are administered by the Idaho Department of Water Resources. The Bureau complies with all State of Idaho water laws.

Mitigation measures implemented because of Resource Management Guidelines or site specific analysis will be monitored for their effectiveness.

Range Resources

Allotment Categorization

All grazing allotments in the resource area have been assigned to one of three management categories based on present resource conditions and the potential for improvement (Appendix E). The "M" allotments generally will be managed to maintain resource conditions (improvements may be done); "I" allotments generally will be managed to improve resource conditions; and "C" allotments will receive custodial management to prevent resource deterioration (improvements generally will not be made).

Allotment-Specific Objectives for the Improvement Category

Multiple-use management objectives will be developed by multiple use area. Future management actions, including approval of allotment management plans, will be tailored to meet these objectives.

Rangeland Management

Grazing Preference - Within each grazing allotment a grazing preference will be established at a level that will ensure that adequate forage is also available for wildlife and where present, wild horses. Sufficient vegetation is reserved for purposes of maintaining plant vigor, stabilizing soil, providing cover for wildlife, and other nonconsumptive uses.

Grazing decisions or agreements will be made for those allotments where adequate information exists. In the other allotments where there is inadequate information, additional data will be collected to provide an adequate basis to begin implementation of any additional decisions needed. An initial stocking rate will also be established, which may be adjusted upwards or downwards in the final decision as a result of monitoring. All grazing decisions will be issued in accordance with applicable BLM regulations.

Implementing Changes in Allotment Management

Activity plans, Allotment Management Plans or Coordinated Resource Management Plans (AMPs or CRMPs) are commonly used to present, in detail, the types of changes required in an allotment, and to establish a schedule for implementation. Actions set forth under the plan that affect the environment will be analyzed and compared to alternative actions. During the analysis, the proposal may be altered to mitigate adverse impacts. The following sections contain discussions of the types of changes likely to be recommended in an activity plan and the guidance that applies to these administrative actions.

Existing AMPs will be reviewed in one year to determine if they need updating or revision. Those AMPs determined to be satisfactory as written will continue to be implemented and managed as written and reviewed again in 5 years. Those AMPs needing updating (minor changes) will be updated within 1 year of review. Those AMPs requiring revision will have new AMPs prepared within 3 years of review.

Livestock Use Adjustments

Livestock use adjustments are most often made by changing one or more of the following: the kind or class of livestock grazing an allotment, the season of use, the stocking rate, or the pattern of grazing.

Forage use levels made from best estimates of forage available now and in 20 years (Appendix E and F) are guidelines to be used for the development of AMPs and CRMPs, and for monitoring prioritization. Adjustments, up or down, from these estimates may be made as a result of monitoring.

Initial stocking rates will be based on the five year average for each allotment. Those allotments with significant areas of poor condition range directly attributable to grazing will receive priority for monitoring programs. If sufficient data is available to determine that grazing levels are too high, adjustments will be made during the third and fifth years of a five year monitoring program. Allotments currently under an allotment management plan or a coordinated resource management plan will be stocked at the five year average and monitored to insure that stocking levels are consistent with other resource capabilities and needs. In those allotments where substantial nonuse has occurred in the past, and the five year average is lower than the preference, the indicated stocking level will be based on the 5-year average plus any forage increases through improvements in range condition and/or seedings.

Range Improvements and Treatments

A variety of range improvements, grazing systems, and other range management practices may be considered in conjunction with livestock management on individual allotments. Such practices will be based on the range management category (maintain, improve, custodial) in which the allotment has been placed and will be formulated in consultation, coordination, and cooperation with livestock operators, and other interested parties.

The extent, location, and timing of improvements will be based on the allotment specific management objectives adopted through the resource management planning process, interdisciplinary development and review of proposed actions, operator contributions, and BLM funding capability.

Range improvement proposals are shown by allotment rather than specific location. Further site specific impact assessment will be necessary in many of the range developments when actual project layout and design has occurred. Cattleguards will be considered a part of the fence and will be installed as deemed necessary. Existing range improvements will be maintained in a current working condition as long as they are deemed necessary to management in all allotments. Existing fences in big game habitat and not meeting current design standards, will be modified to allow big game passage.

Interseeding and reseeding projects with objectives to improve range condition to benefit wildlife or wildlife and livestock will use shrub, forb and grass seed mixture that are normally found in that type of ecological zone/type.

All allotments in which range improvement funds are to be spent will be subjected to an economic analysis. The analysis will be used to develop a final priority ranking of allotments for the commitment of the range improvement funds that are needed to implement activity plans. The highest priority for implementation generally will be assigned to those improvements for which the total anticipated benefits exceed costs.

Grazing Systems

There are existing grazing systems on seven AMPs. Additional grazing systems will be implemented. The type of system to be implemented will be based on consideration of the following factors:

- allotment-specific management objectives;
- resource characteristics including vegetation potential and water availability;
- operator needs; and
- implementation costs.
- resource values including wildlife, riparian and aquatic habitat, soils, etc.

Grazing systems available for consideration include rest rotation, deferred grazing, deferred rotation, and alternate grazing.

Wild Horses

A viable, healthy population of wild horses will be maintained in accordance with federal law. Where levels are to be adjusted, sufficient forage will be provided by adjusting livestock AUMs. Animals being collected for adoption or removed by other appropriate means will receive care and attention. Adopted animals will be monitored in accordance with BLM policy until title for the animal is issued.

Threatened, Endangered, Candidate and Sensitive Plants

There are three sensitive and three candidate (for threatened or endangered listing status) plants in the CRA currently listed. Projects proposed in areas with known sensitive plants will include mitigating measures to protect the plants. If necessary, adjustments to grazing (numbers, rotations, season-of-use or other management techniques) will be used to protect plants.

Wildlife Resources

Priority for habitat improvement or maintenance will be given to Threatened, Endangered and Sensitive species. In accordance with the Endangered Species Act, the U.S. Fish and Wildlife Service will be consulted with on any action that may affect a federally listed, proposed or candidate species. Proposed actions which may adversely affect sensitive species will be modified to avoid adverse impacts or will provide mitigation for unavoidable adverse impacts.

Habitat to support viable populations of all native and desirable exotic wildlife species present in the resource area will be maintained.

The BLM is responsible for managing wildlife habitat on public lands. The Idaho Department of Fish and Game (IDFG) is responsible for managing wildlife populations. Consequently, the BLM will continue to coordinate its activities and actions with the IDFG. The IDFG will be given the opportunity to review and comment on any proposed land disposal or vegetation manipulation (logging, prescribed burn, spray, plow, chain, etc.) at least one full year in advance of the planned action. Habitat Management Plans (HMP's) and cooperative agreements with the IDFG as authorized by the Sikes Act will be the primary vehicles to implement major fish and wildlife management programs on public lands.

ORV recreation activity may be limited in crucial wildlife habitat. Closures to ORV activity will be implemented if the BLM or the Idaho Department of Fish and Game determines harassment to wildlife is occurring.

In crucial wildlife habitats (winter ranges, raptor nest sites, strutting grounds, fawning habitat, etc.), major construction and maintenance work will be scheduled to avoid or minimize disturbance to wildlife. The area and time stipulations are shown in Table 1. Occupancy for oil and gas activities will also be restricted in crucial wildlife habitats as shown in Table 1.

Table 1
Wildlife Habitat Occupancy Restrictions
(for Oil, Gas and Geophysical Exploration and Development
and all major construction))

| Species | No Occupancy Time Periods | Area |
|--|---------------------------|-------------------------------|
| <u>Game Species</u> | | |
| Mule Deer | | |
| Crucial 1/ Winter Range | 12/1 - 4/30 | Entire Habitat Area |
| Antelope | | |
| Crucial Winter Range | 12/1 - 4/30 | Entire Habitat Area |
| Crucial Fawning Range | 5/1 - 6/30 | Entire Habitat Area |
| Elk | | |
| Crucial Winter Range | 12/1 - 4/30 | Entire Habitat Area |
| Sage/Sharp-tailed Grouse | | |
| Winter Range | 12/1 - 2/15 | Entire Habitat Area |
| Breeding Grounds | 2/15 - 6/30 | Entire Habitat Area |
| Nesting/Brood Rearing | 4/15 - 6/30 | 2 miles radius from lek |
| <u>Sensitive Species</u> | | |
| Riparian Associated (River Otter, Mountain Quail) | Year Long | Within 500 ft. of riparian |
| Red-Band Trout/White Sturgeon | Year Long | Within 500 ft. of stream |
| Long-billed Curlew Nesting Areas | 3/15 - 6/30 | |
| Ferruginous Hawk and Swainson Hawk Nests | 3/15 - 6/30 | 3/4 mile radius from nest |
| Osprey Nests | 4/15 - 8/31 | 3/4 mile radius from nest |
| Western Burrowing Owl Nests | 3/15 - 6/30 | 1/4 mile radius from nest |
| <u>Endangered Species</u> | | |
| Bald Eagle/Peregrine | | |
| Winter Nesting | 12/1 - 3/31 Year Long | Within 1 mile of of nest |
| <u>Species of Concern</u> | | |
| Golden Eagle Nest | 2/1 - 6/30 | Within 3/4 mile of nest |
| Prairie Falcon Nest | 3/15 - 6/30 | Within 3/4 mile of nest |
| Heron Rookeries | Year Long | Within 1/2 mile of rookery |
| <u>Special Habitats</u> | | |
| Reservoirs, ponds, lakes, streams, wetlands, riparian | Year Long | Within 500 ft. |

1/ Those areas where big game animals have demonstrated a definite pattern of use each year or an area where animals tend to concentrate in significant numbers (from Interagency Guidelines for Big Game Range Investigation-Idaho Department of Fish & Game, Bureau of Land Management, U.S. Forest Service).

Suppression of wildfire in crucial wildlife habitats will have a high priority. Fire rehabilitation seedings in crucial wildlife habitats will be multispecies, incorporating species to restore wildlife habitat values.

Prescribed burning will be designed to improve or at least not damage wildlife habitat.

Range management practices and developments will be designed or modified to maintain or improve crucial wildlife habitats. Livestock grazing management will incorporate the needs of key plant species important to wildlife.

All new rangeland fences will be built to allow for wildlife passage in accordance with district fence standards for deer and pronghorn antelope. Any existing fences obstructing wildlife movements will be brought into conformance with the adopted standards.

Wildlife escape devices will be installed on any water tanks or troughs that present a hazard to wildlife.

The construction of new roads into crucial wildlife habitats will be avoided. Permanent or seasonal road closures may be instituted where problems exist or are expected.

Areas disturbed during construction activities will be rehabilitated. Seedings will incorporate a mixture of plants adaptable to the site and beneficial to wildlife.

Elk

The "Elk-Timber Relationship of West Central Idaho" will be used to guide evaluation for proposed logging activities in elk habitat.

On crucial elk winter ranges that do not have an adequate composition of early maturing grass, develop small seedings of Siberian wheatgrass and Russian wildrye and other appropriate early maturing grasses to improve deer and elk nutrition in the early spring period.

Mule Deer Habitat

Where applicable, "Mule Deer Habitat Guidelines" contained in Technical Note T/N 336 (USDI, BLM 1979) will be followed. These include:

- In range rehabilitation or manipulation projects, maintain a 60/40 ratio of forage area to cover area.
- Try to achieve a mosaic or mottled pattern of cover in prescribed burning and manipulation projects.
- Improve forage condition by establishing seedings or plantings of bitterbrush, four-wing saltbrush or other palatable shrub species on crucial mule deer winter range that presently has less than 30% palatable shrub composition by weight of the shrub component.

On crucial mule deer ranges that do not have an adequate composition of early maturing grass, develop small seedings of Siberian wheatgrass and Russian wildrye and other appropriate early maturing grasses to improve deer and elk nutrition in the early spring period.

Pronghorn Antelope

Where applicable, "Habitat Management Guides for the American Pronghorn Antelope" contained in Technical Note 347 (USDI, BLM 1980) will be followed. These include:

- Grazing systems designed with the concept of key plant species, preferred pronghorn forage species for forbs and shrubs will be included as key species.
- Vegetative manipulation projects will include mixtures of grasses, forbs and shrubs.

Sage Grouse

Where applicable, "Guidelines for Habitat Protection in Sage Grouse Range" and "Sage Grouse Management Practices" (Technical Bulletin No. 1) - Western States Sage Grouse Committee, June 1974, and 1982 respectively, will be followed. Also, "Habitat Requirements and Management Recommendations for Sage Grouse" Technical Note (USDI, BLM 1974) will be followed where applicable. These include:

- No sagebrush control work would be allowed on sage grouse nesting and wintering habitat where live sagebrush cover is less than 20%.
- Treatment measures should be applied in irregular patterns using topography and other ecological considerations to minimize adverse effects to the sage grouse resource.
- Where fire is used as a habitat management tool, it should be used in such manner as to result in a mosaic pattern of shrubs and open areas, with openings, optimally from 1 to 10 acres in size.
- Maintain the density of sagebrush canopy coverage at 20-30% within nesting habitats and at least 20% in wintering habitats.
- No control of sagebrush would be considered in any area known to have supported important wintering populations of sage grouse in the past 10 years.
- Seed mixtures for range improvement projects and fire rehabilitation projects will include a mixture of grasses, forbs and shrubs that benefit sage grouse.

Improve sage grouse brood rearing habitat where sagebrush canopy cover is greater than 20% by removing sagebrush in small irregular areas and then reseeding.

Birds of Prey

Improve raptor habitat by requiring all new power lines in raptors areas to be constructed to "electrocution proof" specification and that any problem lines now existing be modified to be "electrocution proof."

Riparian and Aquatic Habitat

Riparian and wetland habitat have a high priority for protection and improvement in accordance with state and national policy.

Provide a minimum 100 foot riparian buffer zone from the edge of any riparian habitat to protect riparian vegetation, fisheries, and water quality. Utilize this zone for the general exclusion of the following activities:

- New road construction that parallels streams - use best management practices when construction cannot be avoided,
- Timber harvest activities,
- Spraying of herbicides and pesticides, and
- Gravel extraction.

Utilize a 500 foot buffer zone from the edge of any riparian habitat, for the total exclusion of the following activities:

- Oil and gas occupancy of an exploration or development, and
- Introduction of chemical toxicants or sediments as a result of construction, agriculture, or mining (tailing deposits, holding ponds, etc.).

Suppression of wildfire in riparian habitats will have a high priority. Riparian areas burned will be rehabilitated through protection and, if necessary, seeded or planted.

Maintain State recommended instream flows for the maintenance and preservation of aquatic and riparian ecosystems. In all cases, allow no proposals that include dewatering of the streambed.

Grazing management practices will be designed and established to meet fisheries, riparian, and water quality needs in the development of new allotment management plans and in the revision of existing allotment management plans. In those instances where management systems alone cannot meet objectives, provisions for fencing or other means of exclusion will be utilized. Allow no livestock related activities such as salting, feeding, construction of holding facilities, and stock driveways to occur within the riparian zone of a stream drainage system.

Avoid construction activities which remove or destroy riparian vegetation and instream fish cover.

Design all new spring developments and modify selected existing spring developments to protect wetted areas. Where possible, and if the need exists

for wildlife, fence reservoirs and provide water for livestock away from the reservoirs. Wildlife habitat needs will be considered when reservoir site determinations are made.

In all activities including maintenance of roads, and other facilities follow the guidelines outlined in the best management practices manual for management and protection of western stream ecosystems (American Fisheries Society 1982).

In those areas where fish/riparian values are identified as high priority, all other management practices will be designed to accommodate those priority needs.

Fire Management

Bureau Policy

The present Bureau policy is to aggressively suppress all new fires on or threatening public lands. Whenever multiple fires ignite simultaneously, priorities will be determined by value-at-risk. These values are predetermined by evaluating each resource separately to determine either beneficial or detrimental effects fire has on that resource. Crews are dispatched to fires with the highest values until all crews are utilized. Fires with lower values may have delayed suppression times.

The Bureau cooperates with adjacent landowners to reduce fire hazards. Cooperative efforts may range from consulting with private landowners on hazard reduction plans, to development of cooperative agreements and performance of hazard reduction.

Supplemental District Policy

The suppression policy of the Boise District is to extinguish fires with the least amount of surface disturbance possible. When burning conditions and terrain are such that direct attack is not feasible, the suppression strategy is to burn out from existing natural barriers to establish control points.

Surface disturbing equipment, such as bulldozers, are utilized only when necessary and with management approval. First priority is clearing of existing roads and second priority is construction of new control lines. Surface disturbance will be limited to the absolute minimum in riparian areas.

On areas containing cultural values (designated or suspected sites), identified threatened or sensitive areas, or identified paleontologic sites, no mechanical surface disturbing equipment will be used.

Surface disturbing equipment will be allowed in Wilderness Study Areas only when necessary to prevent loss of human life or property within WSAs or to prevent the spread of fire to areas outside of WSAs where life or property may be threatened. All fire suppression activities will use caution to avoid unnecessary impairment of wilderness suitability values.

Fire lines constructed in WSAs will be recontoured, reseeded with appropriate species, and waterbarred if necessary as soon as practicable. Natural firebreaks will be used whenever possible.

Full suppression will be used with sufficient force necessary to contain the fire during the first burning period. In the event multiple fires occur, suppression priority in the Cascade Resource Area will be as follows:

1. Boise Front Watershed
2. Commercial timber
3. Crucial wildlife habitat
4. Developed recreation facilities and/or cultural areas
5. Payette River Corridor (South Fork)
6. Four-Mile Wild Horse habitat
7. Riparian habitat

Required actions for full suppression are as follows:

- Continue present coordination and exchange of protection with adjacent National Forests and the Southern Idaho Timber Protective Association.
- Pursue an aggressive prevention program to reduce the number of human-caused fires.
- Maintain the existing fire organization personnel, equipment, and locations with the necessary funding.
- Evaluate burned area for emergency rehabilitation and implement if feasible.
- Continue to work with fire management techniques for fire suppression, and in fire hazards, greenstripping, and fuels manipulations, including prescribed fire.

Wildfires which occur in areas identified for prescribed fire may be allowed to burn if that area is scheduled for burning within three years. If fire conditions are not high to extreme, the fire will be suppressed when the prescribed size in acres is met.

Rehabilitation, Greenstripping and Reduction Actions/Procedures

Public lands affected by wildfires will be rehabilitated to accomplish multiple use objectives and designed to reduce fire size. The following rehabilitation, greenstripping and reduction actions and procedures will be applied:

1. Those areas having a high frequency of fires and/or having a high potential for fires, or having re-burns with annual grasses (mostly cheatgrass and medusahead wildrye) will utilize irregular buffer strips along roads and other important areas. These buffer strips will contain seed mixtures that are fire resistant and/or meet watershed protection,

wildlife and riparian objectives. These buffer strips or greenstripping will receive first priority for seeding prior to seeding the rest of the burned area.

2. Prescribed burns (proposed) may be reduced, postponed or cancelled in areas where they, in combination with recent burns, would cause significant cumulative impacts to wildlife or watershed conditions.
3. All grazing licenses issued that include areas recently burned and/or seeded will include a statement concerning the amount of rest needed in the seedings or burn area. Normally two years of rest will be necessary to enable recovery of these areas.
4. A Fire Fuels Break Plan will be developed as part of a fire activity plan after approval of the RMP.
5. The 8100 fund may be used to implement the Fire Fuels Break Plan where range, wildlife or watershed objectives are also met.
6. Seedings will include appropriate seed mixtures to replace wildlife habitat that is burned.
7. Tree seedlings will be planted in high visual areas that have burned or when loss of commercial timber has occurred.

Cultural Resources

The Bureau of Land Management is required to identify, evaluate, protect and wisely manage cultural resources on public lands under its jurisdiction and to ensure that Bureau-initiated or Bureau-authorized actions do not inadvertently harm or destroy nonfederal cultural resources. These requirements are mandated by the Antiquities Act of 1906, the Reservoir Salvage Act of 1960 as amended by P.L. 933-191, the National Environmental Policy Act of 1969, the Archaeological Resources Protection Act of 1979, Section 202 of the Federal Land Policy and Management Act of 1976, and the National Historic Preservation Act of 1966 and amendments, together with 36 CFR 800.

Prior to commencement of any Bureau-initiated or authorized action, which involves surface disturbing activities, sale or transfer from Federal management, the BLM will conduct or cause to be conducted, a Class III (intensive) inventory as specified in BLM Manual Section 8111.4. If properties that may be eligible for the National Register of Historic Places are discovered, the BLM will consult with the State Historic Preservation Officer (SHPO) and forward the documentation to the Keeper of the National Register to obtain a determination of eligibility in accordance with 36 CFR Part 63.

Cultural resource values discovered in a proposed work area will be protected by adhering to the following methods.

- Redesigning or relocating the project.

- Salvaging, through scientific methods, the cultural resource values pursuant to the SHPO agreement.
- Should the site be determined to be of significant value, and/or the above mentioned methods are not considered adequate, the project will be abandoned.

ORV use will be limited to designated or existing roads and trails at all cultural sites.

All significant cultural sites (as determined by the SHPO and National Advisory Council on Historic Preservation) will be retained in federal ownership.

All cultural sites known to be eligible for National Register nomination, or listed on the National Register will be protected from deterioration.

Mineral, Energy, and Geologic Resources

BLM will manage geological, energy, and minerals resources on the public lands. Geological resources will be managed so that significant scientific, recreational, ecological and educational values will be maintained or enhanced. Generally, the public lands are available for mineral exploration and development, subject to applicable regulations and Federal and State laws.

Locatable Minerals (Gold, Silver, Lead, etc.)

Areas within the resource area will be available for exploration and development of locatable minerals except where specifically restricted or excluded. Mineral activities will be conducted in accordance with 43 CFR 3802, 3809 or 3814 as appropriate.

Location of mining claims in accordance with the State and Federal mining laws and regulations is nondiscretionary. The public lands are available for location of mining claims unless withdrawn. Recommendations by BLM for withdrawal are subject to final consideration by the Secretary of Interior.

Saleable Minerals (Sand and Gravel)

Mineral material sales are discretionary actions. All mineral disposals will be made in accordance with 43 CFR 3600. The general policy shall be to promote the use of existing sites. New sites may be set up if it is determined that an existing site will not meet the applicants needs and site impacts can be sufficiently mitigated.

Exploration for new sites will be the responsibility of the applicant. Exploration will be allowed where appropriate under a letter of authorization from the Area Manager. Sale approval will be subject to environmental analysis and may include stipulations to protect other resources.

Leaseable Minerals (Oil and Gas)

Energy and mineral leasing are discretionary actions. Approval of an application for lease is subject to an environmental analysis and may include stipulations to protect other resources. Generally, the public lands may be considered for energy and minerals leasing.

Lease Applications - Upon receipt of a lease application from the State Office, the District will review and make recommendations for stipulations in accordance with 43 CFR 3109 and the District Oil and Gas EA.

Application for Permit to Drill (APD) and Notice of Staking (NOS) - Follow operating order #1 and 43 CFR 3160.

Geophysical Operations - Notices of Intent to conduct Oil and Gas Exploration Operations will be processed within 15 days of receipt. Stipulations and mitigation measures will be applied in accordance with 43 CFR 3109 and the District Oil and Gas EA.

Field examinations will be made to insure compliance with stipulations on Applications for Permits to drill, Notices of Staking, and Notices for Geophysical Operations.

Leaseable Mineral (Geothermal)

Lease Applications - Upon receipt of a lease application from the State Office, the District will review and make recommendations for stipulations to protect resource values in accordance with 43 CFR 3204 and the District-wide Geothermal EA.

Exploration Operations - A notice of intent and permit to conduct exploration operations (geothermal resources) will be processed within 30 days of receipt. Stipulations and mitigation measures will be applied in accordance with 43 CFR 3209 and the District-wide Geothermal EA.

Field examinations will be made to insure compliance with approved notices.

Geologic

Unique geologic features of the district will be protected and interpreted for the public.

Wilderness

Preliminary Recommendations to Congress

Only Congress can designate an area as wilderness. BLM recommends areas suitable or unsuitable for preservation as wilderness. Those recommendations are preliminary and are subject to the findings of mineral surveys and final consideration by the Secretary of the Interior and the President before being submitted to Congress. Until Congress acts on the President's suitability recommendations, BLM will manage wilderness study

areas in accordance with the Interim Wilderness Management Policy (IMP). After Congress acts, a different policy will apply, depending on whether or not Congress designates an area as wilderness.

Areas Designated Wilderness

Areas designated as wilderness by Congress will be managed in accordance with BLM Wilderness Management Policy. Specific management provisions will be formulated in a wilderness management plan developed for each area following designation.

Areas Not Designated Wilderness

Areas determined by Congress to be unsuitable for wilderness designation will be managed for other purposes. A tentative management scheme developed during the planning process will be given final consideration following Congressional action on the President's suitability recommendations.

Recreation

Recreation Management

BLM will manage recreation on the public lands. A variety of means to maintain or improve recreation opportunities will be considered. Some areas may be subject to special restrictions to protect resources or eliminate or reduce conflicts among uses.

The Boise District will provide and maintain recreation opportunities and facilities on public lands. Recreation facilities are provided to meet existing or anticipated demand, for public safety and to protect recreation resources.

Potential National Wild and Scenic Rivers

Federal land management agencies are responsible for evaluating certain rivers to determine suitability for inclusion in the National Wild and Scenic Rivers System. For those rivers determined to be suitable, the agencies will provide protection by preparing recommendations to have rivers studied and by taking immediate action to protect them. Prior to the time suitability recommendations have been acted upon by Congress, the rivers will be treated as though they were components of the National Wild and Scenic Rivers System. Public lands along the Payette River (North and South Forks) will be managed accordingly by the District until Congress acts.

Motorized Recreation Vehicle Access and Use

Through the planning process, public lands will be placed in one of three categories for purposes of controlling motorized vehicle access: open, limited, and closed. Guidelines for these categories are as follows:

Open - Motorized vehicles may travel anywhere.

Limited - Motorized vehicles are permitted, subject to specified conditions such as seasonal limitations, speed limits, and designated routes of travel as developed during subsequent activity planning.

Closed - Motorized vehicles are prohibited.

Paleontologic Resources

Paleontologic resources will be managed to protect and maintain or enhance sites or areas for their scientific and educational values.

This will include allowing vertebrate paleontologic specimen collecting through a permit procedure and reviewing all EA's and CER's to determine if actions impact paleontologic resources. A bibliographic research will be made to help in determining the importance of the various paleontologic sites within the resource area.

Visual Resource Management

The visual or scenic values of the public lands will be considered whenever any physical actions are proposed on BLM lands. The degree of alterations to the natural landscape will be guided by the criteria established for the four Visual Resource Management Classes as outlined in BLM 8400. VRM Classes will be managed as shown on Map 3-8.

Forest Management

The public lands in the district containing commercial timber or other forest products such as firewood, posts and poles, and Christmas trees will be considered for harvest except where expressly closed by law or regulation. Some areas may also be subject to special restrictions to protect resources. Harvesting methods utilizing clearcutting will be limited to a size of 40 acres or less and will be blended into the surrounding landscape.

Management guidelines for wildlife will be as follows:

No timber harvest access will be allowed prior to July 1 in elk calving areas.

All roads will be rehabilitated by outsloping, waterbarring, or seeding.

Roads will be closed in crucial wildlife areas.

Undergrowth will be left as intact as possible.

Stringers of trees of sufficient size and thickness to be used as sight barriers between cutting areas will be determined on a site specific basis.

The need to eliminate livestock grazing on cut areas for up to 3 years to allow shrub enhancement will be determined on a site specific basis.

Adequate hiding and thermal cover along major roads will be provided.

Maintain snag trees in timbered areas to the greatest extent practical to provide habitat for cavity nesting birds and other snag dependent species.

Areas of Critical Environmental Concern

Areas of critical environmental concern (ACEC) are established through the planning process as provided in the Federal Land Policy and Management Act for "... areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards." Management will be tailored to the specific needs of each ACEC.

Coordination With Other Agencies, State and Local Governments, and Indian Tribes

BLM will coordinate its review of detailed management plans (activity) and individual projects prepared in conjunction with the RMP to ensure consistency with officially adopted and approved plans, policies, and programs of other federal agencies, state and local governments, and Indian tribes. Cooperative agreements and memoranda of understanding will be developed, as necessary, to promote close cooperation between BLM and other federal agencies, state and local governments, and Indian tribes.

Weeds (Control of Noxious)

BLM districts will work with respective County governments to monitor the location and spread of noxious weeds and to maintain up-to-date inventory records. BLM will control the spread of noxious weeds on public lands where possible, where economically feasible, and to the extent that funds are prioritized for that purpose.

Noxious weed control will be conducted in accordance with integrated weed management guidelines and design features identified in the Northwest Area Noxious Weed Control Program Final Environmental Impact Statement of December, 1985. The Idaho State Director issued a Record of Decision on April 7, 1986 for this program.

Public Utilities

Generally, public lands may be considered for the installation of public utilities, except where expressly closed by law or regulation. Project approval will be subject to preparation of an environmental assessment or environmental impact statement. BLM will work closely with the Idaho Public Utilities Commission, other state and federal agencies, local governments, utility companies, and other interested parties to determine appropriate locations and environmental safeguards for public utilities involving public lands.

Economic and Social Considerations

BLM will ensure that any management action undertaken in connection with this plan is cost-effective and takes into account local social and economic factors. Cost-effectiveness may be determined by any method deemed appropriate by the Bureau for the specific management action involved.

Detailed Management (Activity) Plans

The RMP provides general guidance for the resource area. More detailed management plans, called activity plans, will be prepared to deal with areas where a greater level of detail is required. Activity plans will indicate specific management practices, improvements, allocations, and other information for a particular site or area. They will be prepared for most major BLM programs such as range (allotment management plans), recreation (special recreation area management plans), wildlife (habitat management plans), wilderness (wilderness management plans), and cultural resources (cultural resource management plans). Where two or more activities have activity plan needs in the same general area, a single consolidated activity plan may be prepared. Coordination, consultation, and public involvement are integral parts in the formulation of activity plans.

Environmental Reviews

The NEPA process will be followed on all projects prior to approval. Site-specific analysis will allow some projects to be considered under provisions of the categorical exclusion review process and others to be considered under the environmental assessment process. Environmental impact statements will be prepared on those actions which may significantly affect the quality of the human environment.

Plan Maintenance

Resource management plans and supporting components shall be maintained as necessary to reflect minor changes in data. Such maintenance is limited to further refining or documenting a previously approved decision incorporated into the plan. Maintenance shall not result in expansion in the scope of resource uses or restrictions, or change the terms, conditions, and decisions of the approved plan. Maintenance is not considered a plan amendment and does not require formal public involvement and interagency coordination or the preparation of an environmental assessment or environmental impact statement.

Plan Amendments

A resource management plan may be changed through amendment. An amendment shall be initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions and decisions of the approved plan. An amendment shall be made through an environmental impact statement, if necessary, public involvement, interagency coordination and consistency determination and any other data or analysis that may be

appropriate. In all cases, the effect of the amendment on the plan shall be evaluated.

Examples of actions which would require an amendment include disposal of land not identified for transfer, change in management objectives for an area or resource, or changes in special designations. Additional range improvement projects (fences, pipelines, reservoirs, spring developments) not originally identified in a plan, may be approved through the NEPA process without a plan amendment if the project is in conformance with the management objectives of the multiple use area and is not in conflict with the management guidelines and objectives of other resource activities.

SUPPORT REQUIREMENTS

Land Transfer and Utility ROWs

Cadastral survey services may be needed to locate public land boundaries and appraisal reports would be needed to estimate value of lands offered for sale and exchange. Legal services to review legal real estate documents would also be needed. Engineering support would be needed to review design specifications (analysis) on utility ROW proposals (power lines, gas lines, phone lines, roads, etc.) Appraisal support for valuation of ROWs would be needed.

Soil, Water, and Air

Fire management support would be needed to reduce damage by wild fire and engineering services (operations) would be needed for fire rehabilitation (reseeding to reduce soil erosion).

Livestock and Wild Horse Management

Engineering and fire management support would be needed for project layout, design, and implementation. Coordination with BLM wild horse distribution centers would be necessary prior to roundup.

Wildlife (Terrestrial and Aquatic)

Fire management support would be required to protect crucial habitats and to control prescribed burning projects. Idaho Department of Fish and Game coordination would be needed for all prescribed burn projects. Engineering and operations support for gap fencing, aquatic habitat structures and riparian area improvement projects would also be needed.

Fire Management

Support from Boise Interagency Fire Center and other fire fighting units for presuppression and suppression planning and equipment may be required.

Minerals (Energy and Nonenergy)

Cadastral services to locate public land boundaries and cultural and historical clearances would be needed.

Recreation

Fire management support would be needed for managing natural fire to protect significant resources. Engineering services support would be needed for the design and development of proposed facilities that would be identified from RAMPs. Cartographic services for information brochures and ORV plan maps would be needed.

Special Designations

Areas identified for special designations (ACECs, National Register, Wild and Scenic River, SRMAs, etc.) would need support of fire management to protect the significant resources and associated values. Coordination with the State Historic Preservation Office, Idaho Fish and Game Department, Idaho Parks and Recreation Department, and Idaho Department of Water Resources would be required.

CONSISTENCY WITH OTHER PLANS

Land Transfer and Utility ROWs

Coordination and conferring with affected state and local governments would continue prior to final disposal decisions.

The concept of identifying sensitive areas to be avoided has received support from state and local governments and some utility companies. However, the location of some of these avoidance areas may be in conflict with the long term (40-year) implementation proposal to meet power needs identified by the Western Power Group. Existing ROW locations and approved utility ROW routes identified in previous environmental impact statements still remain available for ROW developments.

Soil, Water, and Air

Action by BLM for protection of high erosion hazard are consistent with federal (SCS), local (Soil Conservation District) and county plans.

Livestock and Wild Horse Management

Continuation of livestock grazing on the public lands is consistent with state and county goals for maintaining a healthy economy, a varied economic base and a quality of social well being.

Wildlife (Terrestrial and Aquatic)

The actions outlined in the plan are consistent with Idaho Fish and Game Department's big game population goals and the fisheries management plan.

Fire Management

The fire management concepts and actions are consistent with state and local government objectives.

Minerals (Energy and Nonenergy)

The local land use plan supports the development of mineral resources in a manner compatible with environmental goals (protect streams and minimize unfavorable visual impacts).

Recreation

The specific management of recreation on public lands was not addressed in the Idaho Statewide Comprehensive Outdoor Recreation Plan (SCORP) or in local plans. However, the recreation objectives of the RMP are consistent with the overall objectives of the SCORP and the Idaho State Water Plan (Payette River protection). ORV actions appear to be consistent with existing state and local government plans and ordinances.

Special Designations

The protection of resources with significant recreation, wildlife, cultural, historical, and paleontologic values are consistent with the respective state agency plans, policies, and programs. Local agency plans do not address the protection of the specific sites identified in this plan.

IMPLEMENTATION

Land Transfer and Utility ROWs

Land reports, environmental assessments and required clearances for cultural and paleontologic resources will be prepared for all proposals. Those proposals identified to be in the public interest and that have minimal or no significant adverse impacts to other public resources may be approved.

Areas identified as sensitive (selected wildlife habitats or riparian habitat zones, threatened and sensitive plant sites, sites having unique or special recreation, scenic beauty, cultural or paleontologic values) have been identified as avoidance areas. The remaining public lands in the resource area are available for possible location of ROWs. Environmental assessments and required clearances will be prepared for all projects.

Soil, Water, and Air

Site specific projects will be reviewed for compliance with existing laws, rules, and regulations. Particular attention to project design in areas of high erosion hazard potential. A water quality monitoring plan will be developed (See Appendix P).

Livestock and Wild Horse Management

Rangeland Program Summaries (RPS) will be issued and show summarized grazing levels and allotment categories. Site specific grazing use adjustments will be described in the RPSs developed. Allotment management plans will be developed on specific allotments, and will include benefit/cost analysis and environmental assessments of specific facilities and management actions. A monitoring plan will be developed (See Appendix P) and implemented. The wild horse herd and its habitat will be monitored and "round ups" will be scheduled at intervals that ensure maintenance of objective numbers and habitat quality.

Wildlife (Terrestrial and Aquatic)

Crucial habitats (big game winter ranges) will be monitored to ensure maximum opportunity for survival to occur. ACEC designation and provisions will be applied to long-billed curlew and Columbian sharp-tailed grouse habitat. Project development will be programmed.

Fire Management

District fire crews will be used for initial suppression efforts. Additional fire fighters and support services of BIFC or other individuals could be called in to help suppress large uncontrolled fires. A fire management plan will be developed for the resource area.

Minerals (Energy and Nonenergy)

Procedures outlined in current laws and regulations (federal and state) will be applied to all applications. Mineral reports and environmental assessments will be prepared and appropriate clearances obtained. Standard and special stipulations will be followed.

Recreation

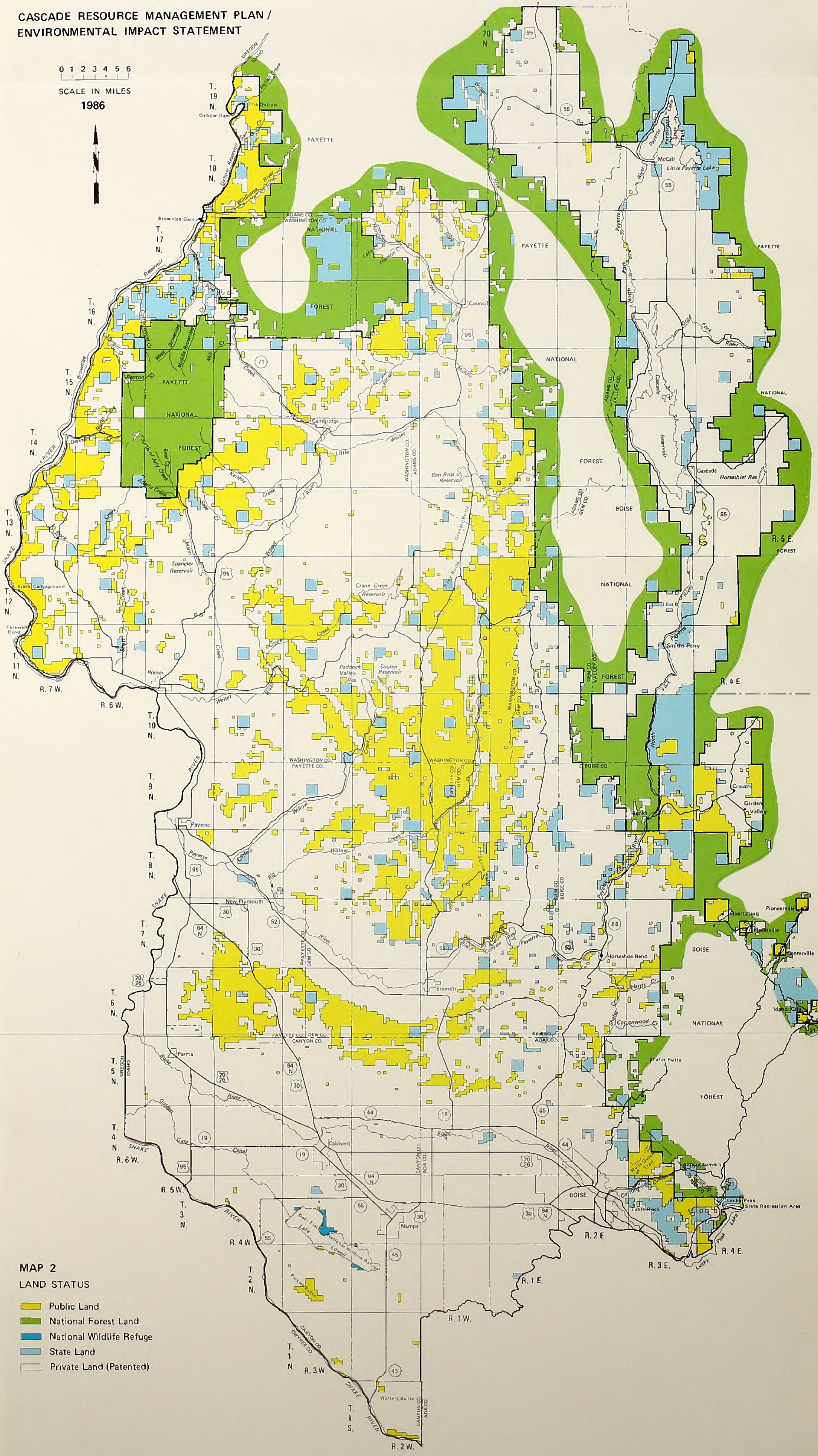
Projects identified through the RAMPs will be consistent with ROS (Appendix L) management objectives. Individual site plans will be prepared for new facility developments. An ORV plan and maps covering the resource area will be prepared showing areas closed or with limitations.

Special Designations

Department of the Interior approval for administrative actions will be sought for National Register of Historic Places designation. Congressional action for Wild and Scenic Rivers study will be sought by the Secretary of the Interior.

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

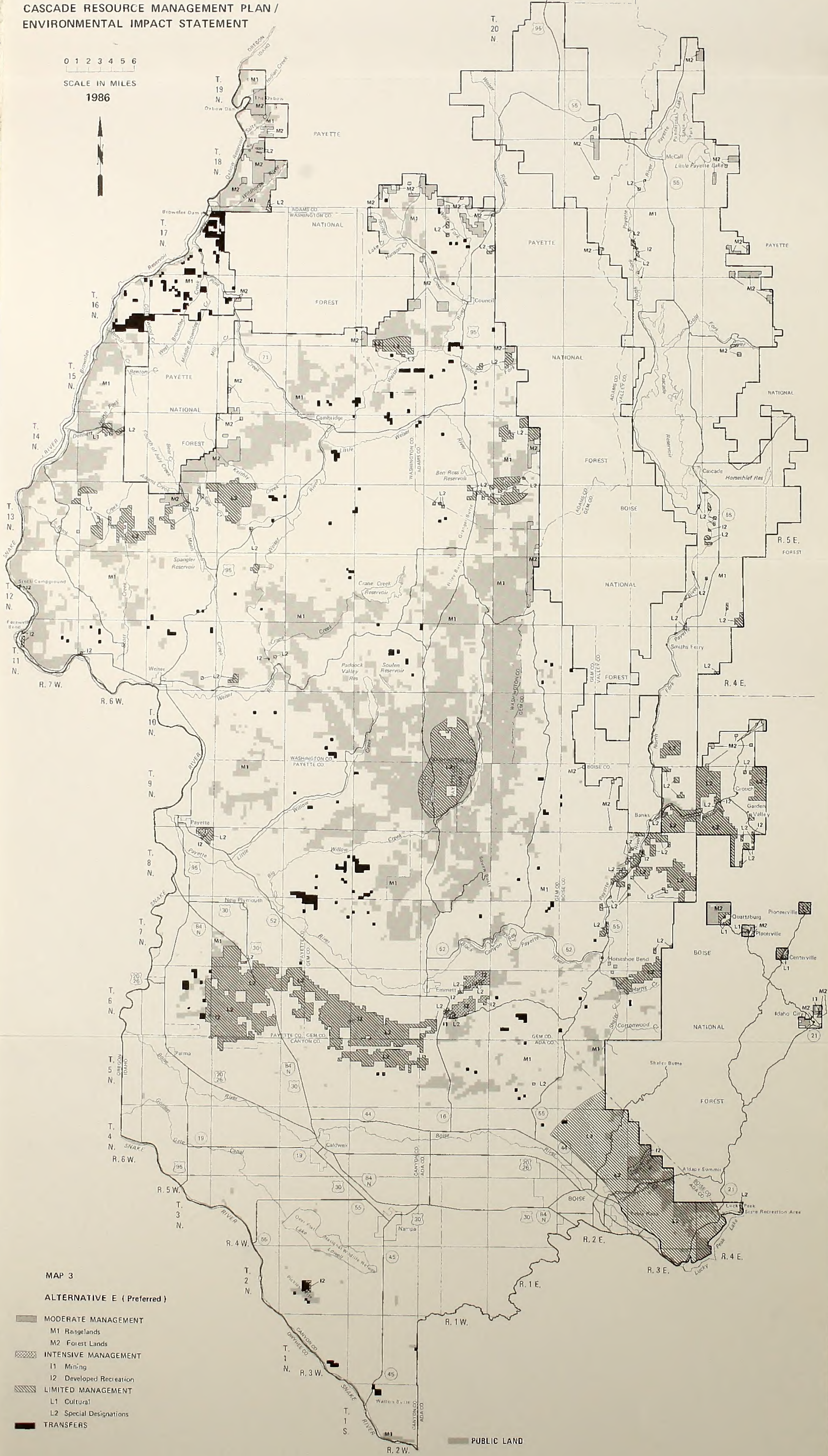
0 1 2 3 4 5 6
SCALE IN MILES
1986



MAP 2
LAND STATUS

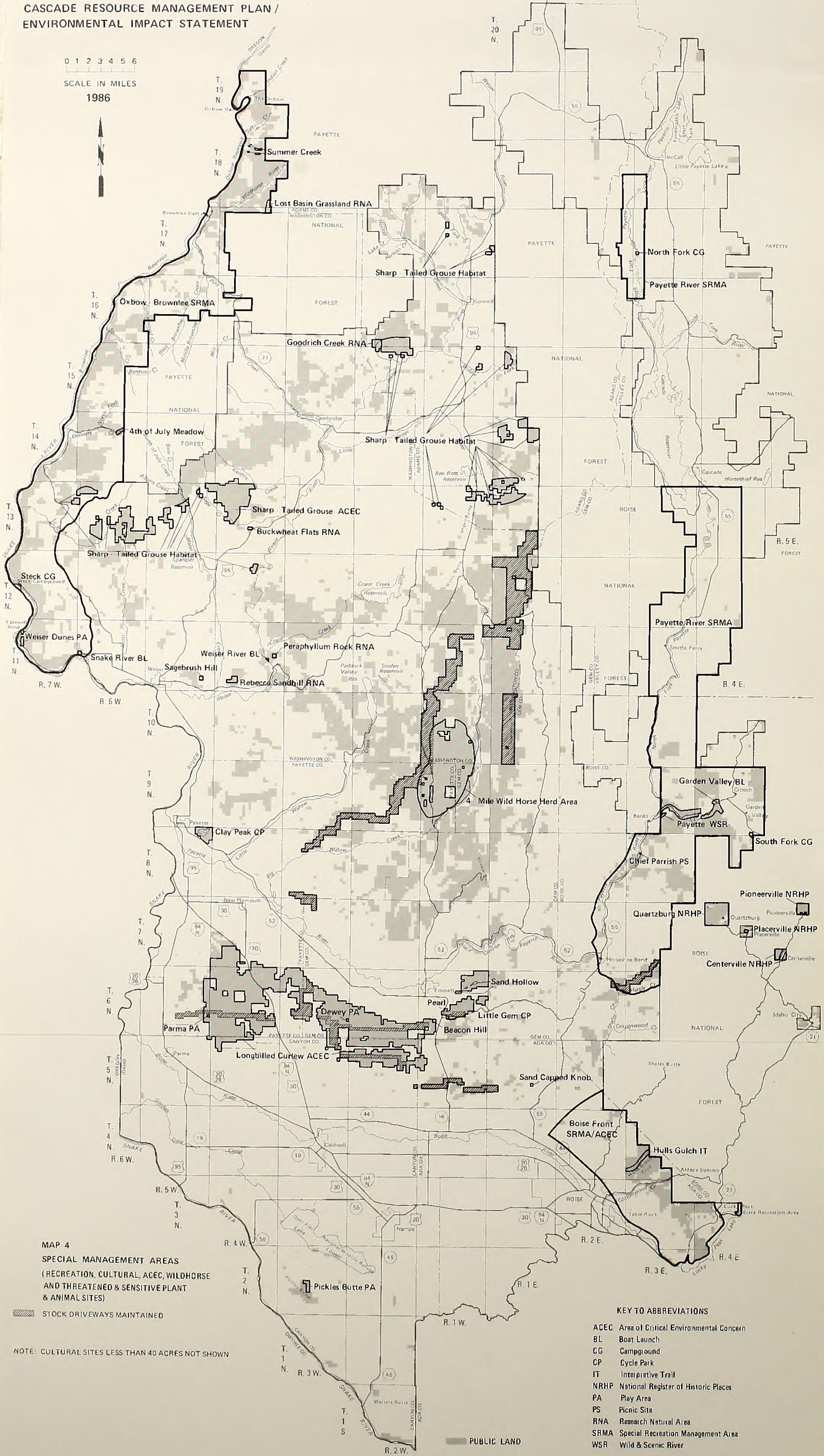
- Public Land
- National Forest Land
- National Wildlife Refuge
- State Land
- Private Land (Patented)

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 3
ALTERNATIVE E (Preferred)

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



MAP 4
SPECIAL MANAGEMENT AREAS
(RECREATION, CULTURAL, ACEC, WILDHORSE
AND THREATENED & SENSITIVE PLANT
& ANIMAL SITES)

STOCK DRIVEWAYS MAINTAINED

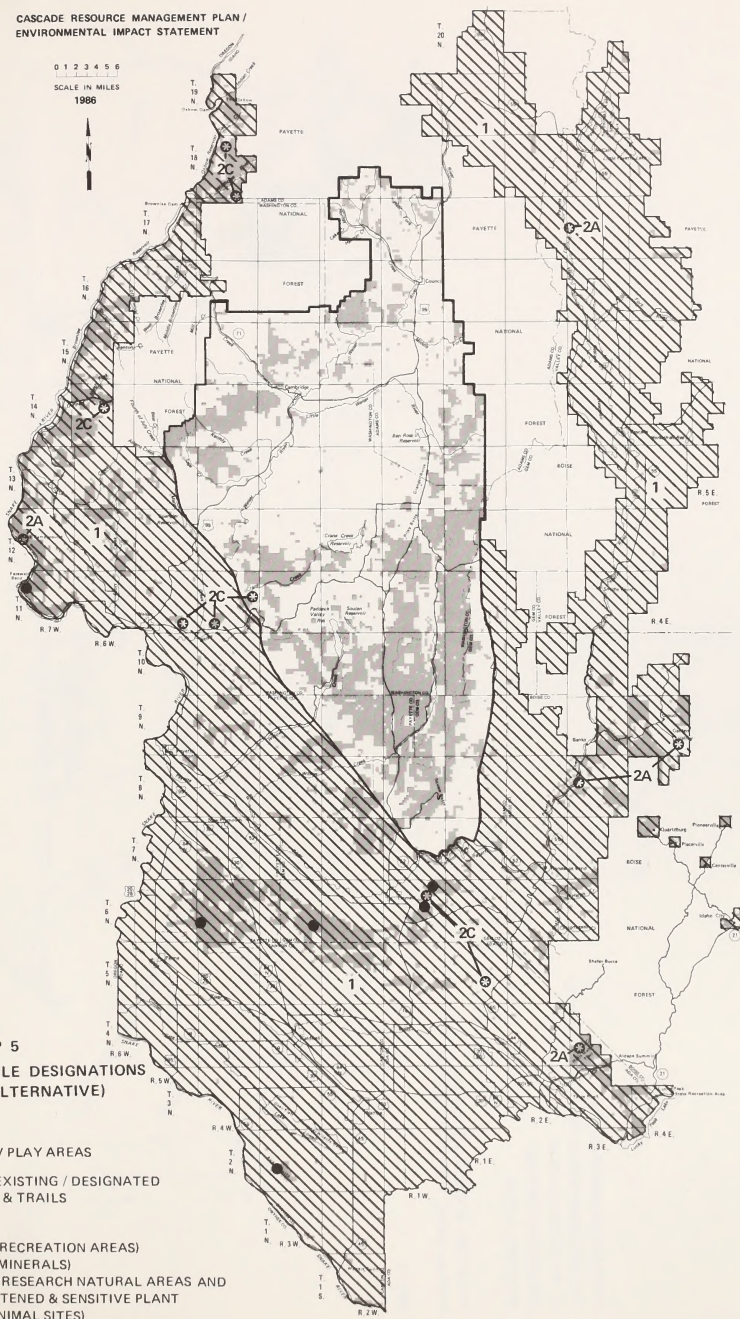
NOTE: CULTURAL SITES LESS THAN 40 ACRES NOT SHOWN

KEY TO ABBREVIATIONS

- ACEC Area of Critical Environmental Concern
- BL Boat Launch
- CG Campground
- CP Cycle Park
- IT Interpretive Trail
- NRHP National Register of Historic Places
- PA Play Area
- PS Picnic Site
- RNA Research Natural Area
- SRMA Special Recreation Management Area
- WSR Wild & Scenic River

CASCADE RESOURCE MANAGEMENT PLAN /
ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986



MAP 5

OFF-ROAD VEHICLE DESIGNATIONS
(PREFERRED ALTERNATIVE)

□ OPEN

● OPEN ORV PLAY AREAS

▨ LIMITED TO EXISTING / DESIGNATED
ROADS & TRAILS

⊗ CLOSED

2A CLOSED (RECREATION AREAS)

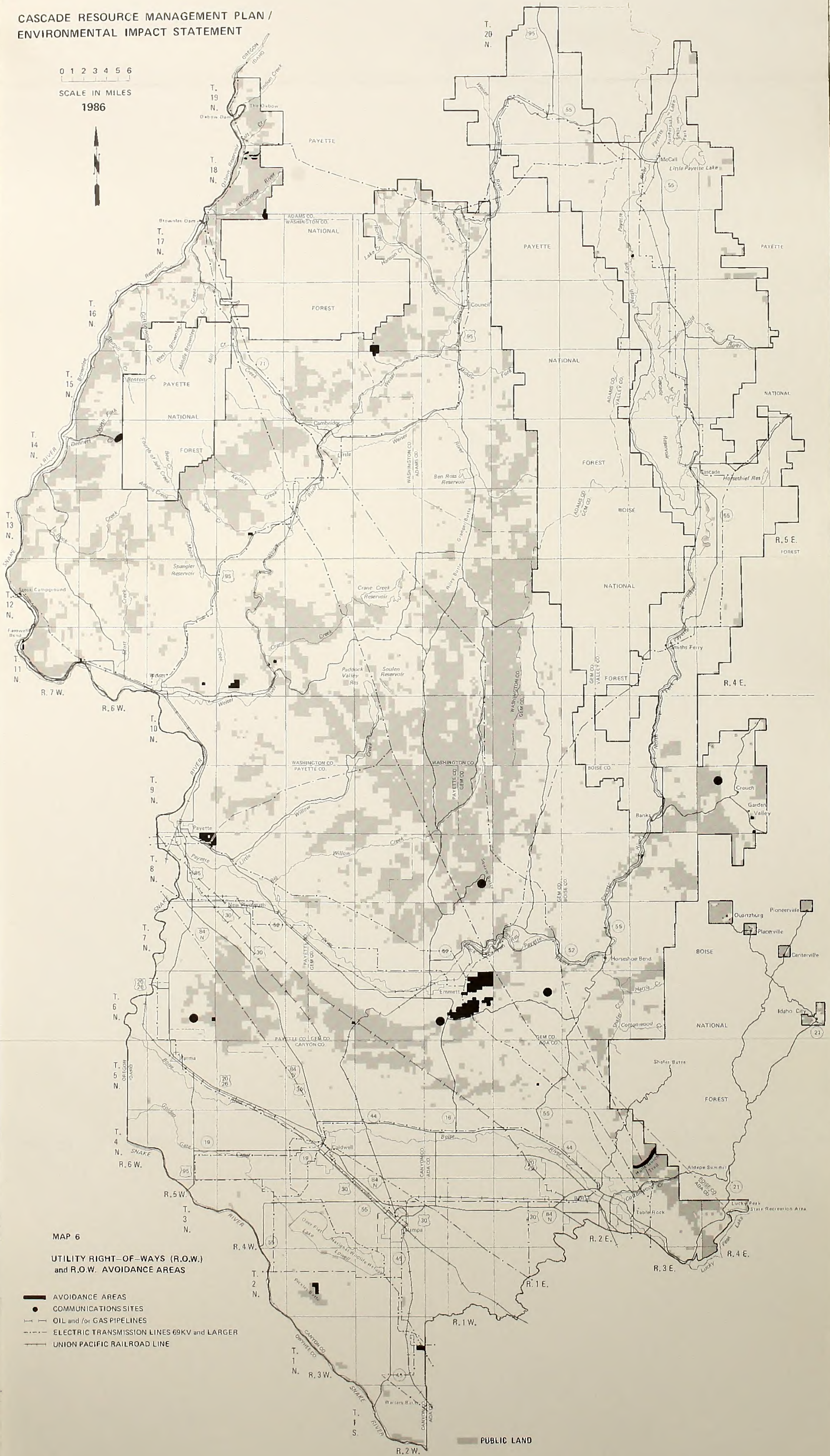
2B CLOSED (MINERALS)

2C CLOSED (RESEARCH NATURAL AREAS AND
THREATENED & SENSITIVE PLANT
AND ANIMAL SITES)

None

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

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SCALE IN MILES
1986



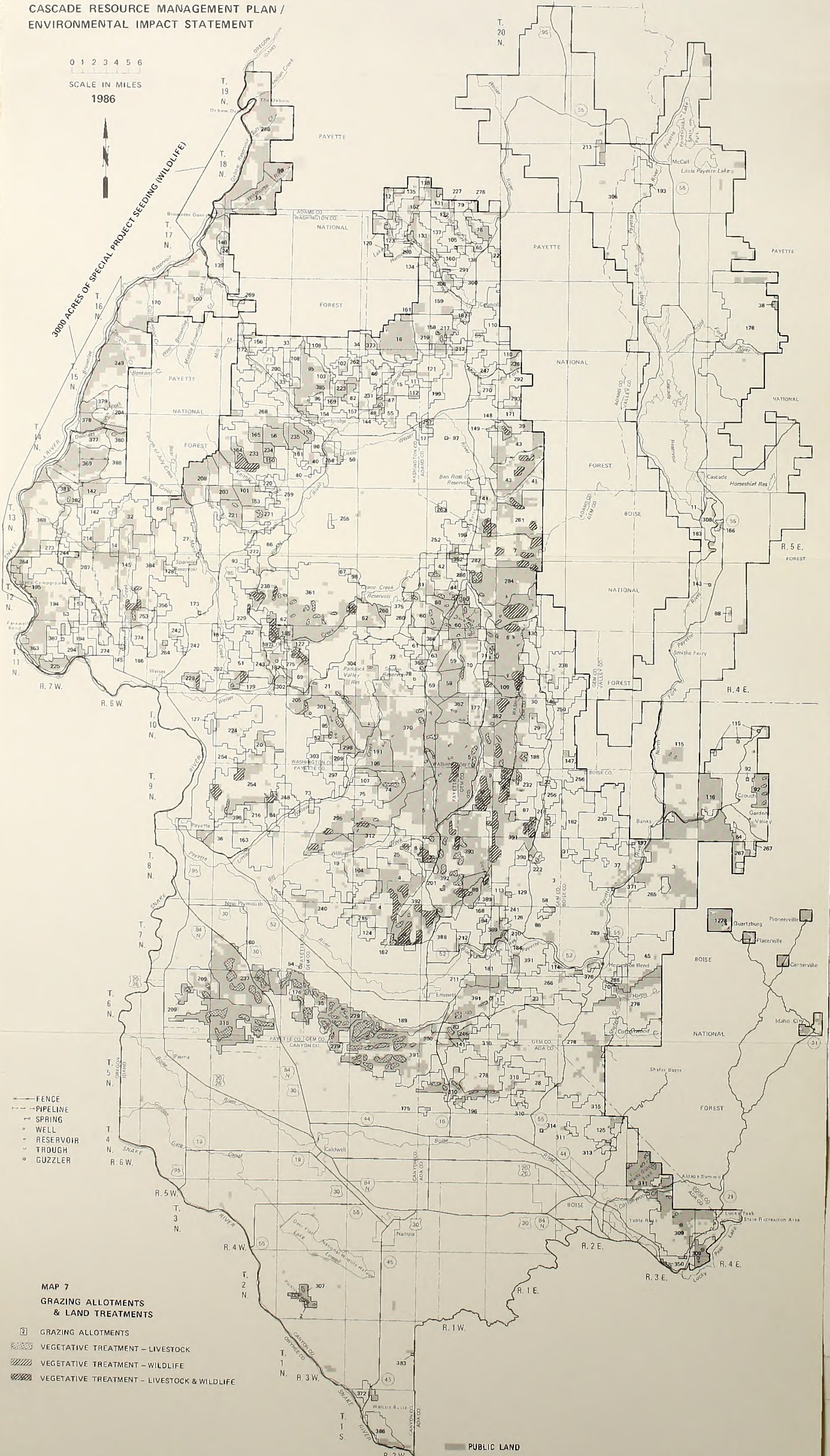
MAP 6

UTILITY RIGHT-OF-WAYS (R.O.W.)
and R.O.W. AVOIDANCE AREAS

- AVOIDANCE AREAS
- COMMUNICATIONS SITES
- OIL and/or GAS PIPELINES
- ELECTRIC TRANSMISSION LINES 69KV and LARGER
- UNION PACIFIC RAILROAD LINE

PUBLIC LAND

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT



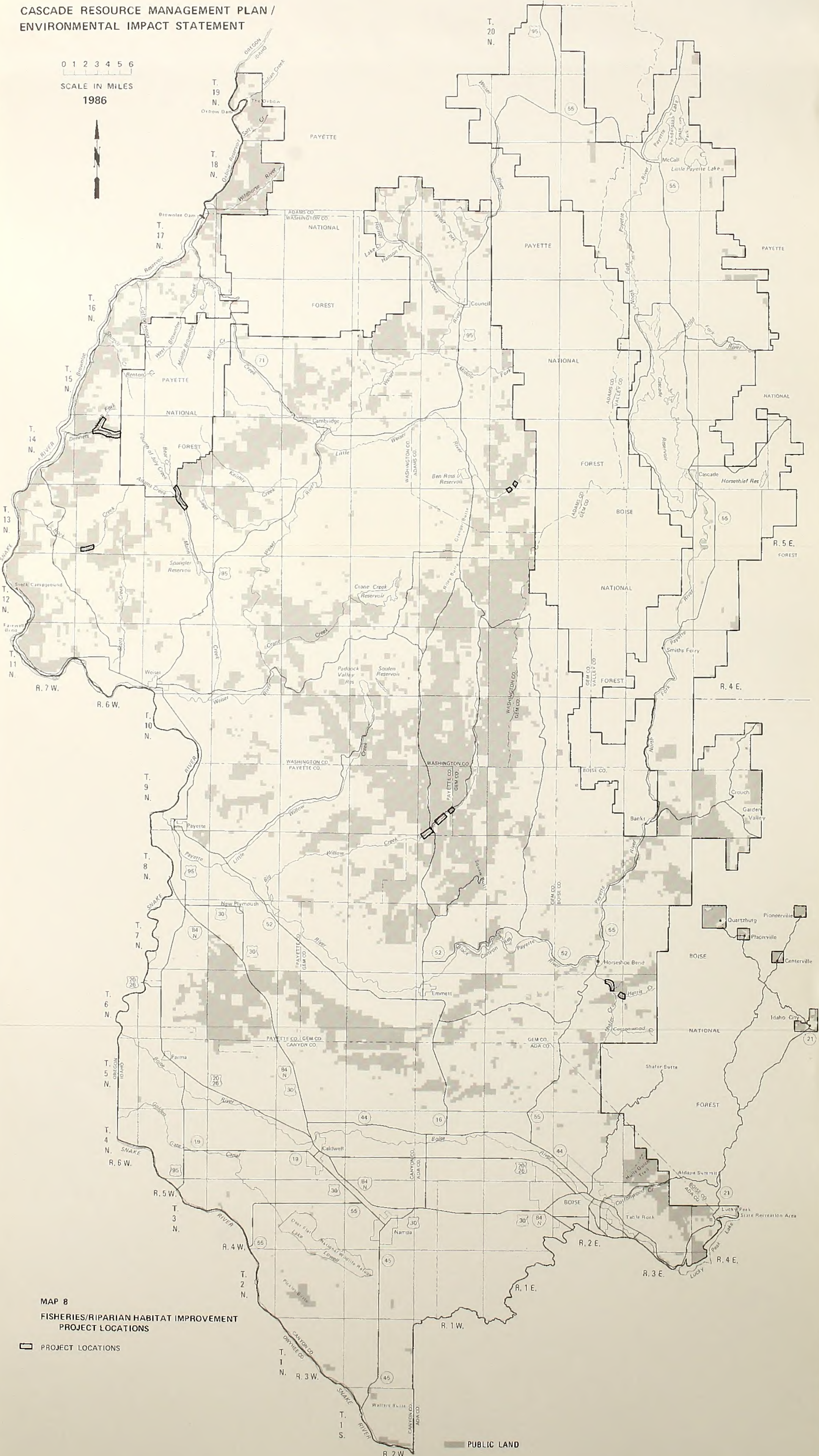
MAP 7
GRAZING ALLOTMENTS
& LAND TREATMENTS

- 2 GRAZING ALLOTMENTS
- VEGETATIVE TREATMENT - LIVESTOCK
- VEGETATIVE TREATMENT - WILDLIFE
- VEGETATIVE TREATMENT - LIVESTOCK & WILDLIFE

PUBLIC LAND

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986



MAP 8
FISHERIES/RIPARIAN HABITAT IMPROVEMENT
PROJECT LOCATIONS

PROJECT LOCATIONS

PUBLIC LAND

PART II

DRAFT ENVIRONMENTAL IMPACT STATEMENT

DRAFT CASCADE RESOURCE MANAGEMENT PLAN
AND DRAFT ENVIRONMENTAL IMPACT STATEMENT

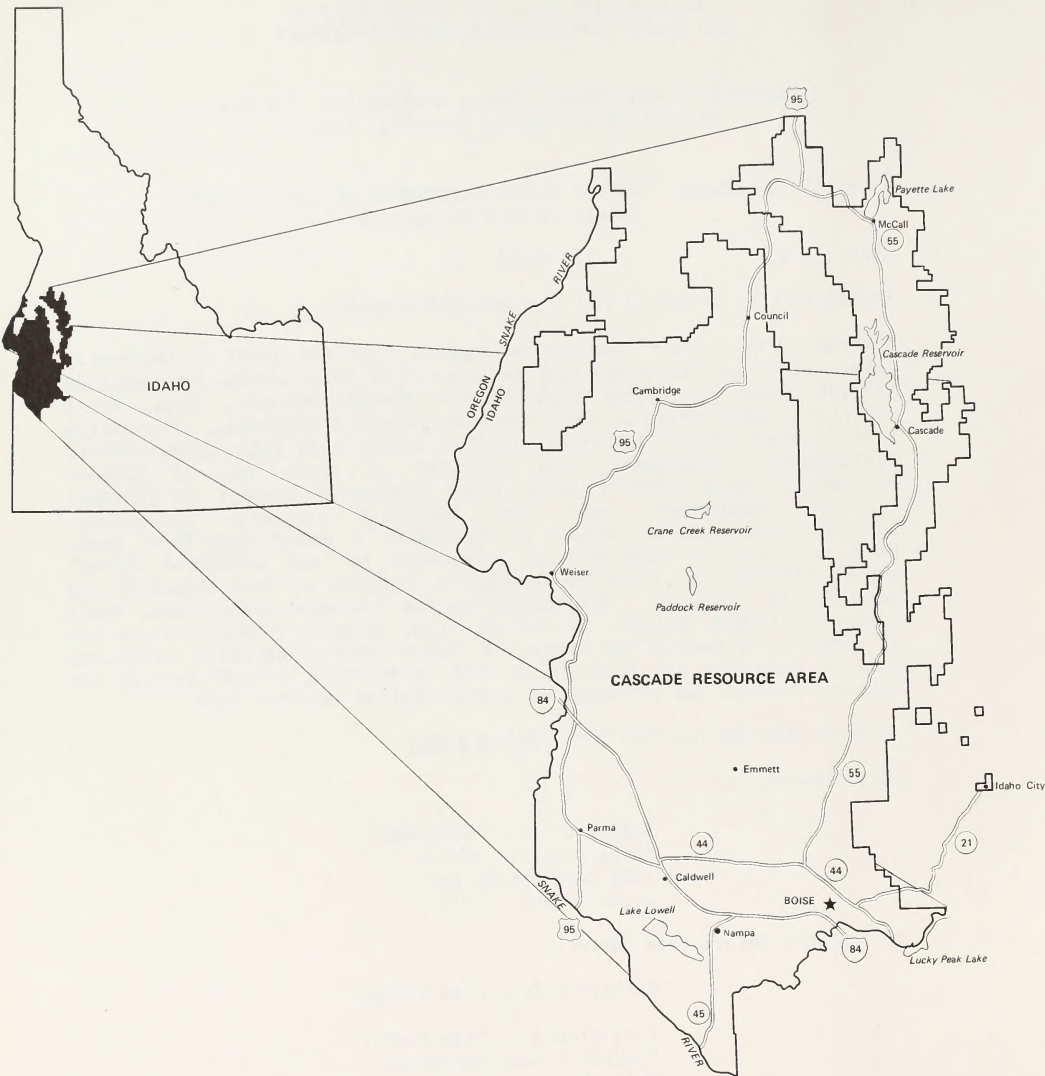
Portions of Ada, Adams, Boise, Canyon, Gem, Payette,
Washington and Valley Counties, Idaho.

1. Responsible Agency: United States Department of the Interior
Bureau of Land Management
2. Draft (X) Final ()
3. Administrative Action (X) Legislative Action ()
4. Abstract: This draft resource management plan and draft environmental impact statement describes and analyzes five alternatives for managing 487,466 acres of public land in the Cascade Resource Area, Boise District. Alternative A would continue present management. Alternative B would favor higher livestock stocking rates, more range improvements, agricultural development, and transfer of lands out of Federal ownership. Alternative C would favor habitat management to increase wildlife populations, and less commodity intensive management. Alternative D would be similar to Alternative B except that there would be a much greater intensity of management for all resources through higher monetary and intensive management programs in both commodity and noncommodity resources. Alternative E, the Preferred Alternative, would pursue a optimum approach to multiple use, allowing production and use of commodity resources and commercial use authorization while protecting fragile resources and wildlife habitat, preserving natural systems and cultural values, and allowing for nonconsumptive resource uses.
5. Comments must be received by: NOV 28 1986
6. Send Comments to:

Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705

7. For Further Information Contact:

Richard Geier, Area Manager
or
Fred Minckler, Team Leader
Bureau of Land Management
Boise District Office
3948 Development Avenue
Boise, Idaho 83705
Telephone: (208) 334-1582



PART II

SUMMARY

This draft Environmental Impact Statement (DEIS) describes five alternatives for managing 487,466 acres of public lands in the Cascade Resource Area (CRA), Boise District. Each alternative provides a separate and different management prescription for managing the public lands and ranges from an overall production emphasis to overall protection emphasis.

The Resource Management Plan (RMP) is developed to guide the management of public land resources in the Cascade Resource Area and ensure that these lands and resources are planned and managed in accordance with the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations. To achieve this, the planning process must be responsive to the major issues identified by the public and within the boundaries of current laws, rules and regulations, and national and state policies. The contents of the five alternative plans are primarily focused on resolving the following key issues identified by the public: land tenure and adjustment, range resource management and future management of the Payette River Corridor. Special management concerns addressed include off-road vehicle use, timber management, and special designations.

The RMP is also the framework plan by which other, more specific, activity plans will be developed.

The five alternatives are summarized as follows:

Alternative A

This alternative reflects the continuation of present management practices and programs now occurring on the public lands in the Cascade Resource Area. Changes in livestock management, land transfers and other programs would be handled as the need arises. Most of the objectives of the current MFPs have been accomplished. This is the "no action" alternative.

Land tenure adjustment would include a maximum of 2,680 acres considered for transfer from federal ownership. Included in this total would be 1,040 acres considered for agricultural development under the Desert Land Entry program. Utility rights-of-way would be restricted on 4,333 acres.

Broad based soil erosion would increase an average of 10% over current levels. A substantial increase in wind blown soil erosion could occur on 1,040 acres identified for transfer for agricultural development. Additional erosion would result on the 100 to 400 acres annually identified for timber harvest.

Livestock grazing would be maintained at the current five year average of 66,424 AUMs. New range improvements would be minimal and no land treatments would be initiated. Grazing management would generally remain unchanged. Grazing levels would be reduced to 66,014 over 20 years because of land transfers and restrictions on special designation areas.

Rangeland condition would show a long term decline on 3 to 5% of the area over 20 years. Wildfire and grazing would be the primary causes for this decline.

Two wild horse herds would be managed to support a total of 22 head at the end of 20 years.

Wildlife habitat conditions would decline over 20 years. Mule deer and elk habitat would only be able to support a 3% decline in populations.

Eleven miles of riparian and 14 miles of aquatic habitat would improve as a result of livestock management, fencing to control livestock, instream work, and streambank planting. Five miles of riparian habitat would be degraded due to livestock grazing. AMP revisions would benefit 71 and 73 miles of riparian and aquatic habitat, respectively.

There would be no prescribed burns to improve rangelands. The entire resource area would be under full fire suppression. Fire management costs would be about \$109,300 annually.

Mineral activity would be open on 94% of the resource area for both leasable and locatable minerals. Withdrawals totaling 31,177 acres would be in effect.

Motorized vehicle recreation would be unrestricted on about 75% of the resource area, limited on 25%, and closed on less than 1%. Recreation use for all activities would increase from 622,000 activity occasions to 1,034,000 activity occasions by the year 2000. This increase would occur regardless of what alternative for managing public land is selected.

Cultural resource sites would be managed under standard operating procedures. The Placerville townsite on the National Register of Historic Places would receive additional protection. Other cultural sites would continue to deteriorate caused by livestock trampling, erosion, and vandalism. Paleontologic resources would be protected by standard operating procedures in this and all alternatives.

Two Research Natural Areas totaling 475 acres would be designated. Limiting ORV use and adjusting livestock management would protect candidate and sensitive plants in these areas.

Forest management would occur on 26,686 acres of suitable commercial timber lands. The timber annual harvest would be one million board feet. Harvest would occur on up to 8,000 acres over 20 years. Recreation wood cutting would continue in this and all alternatives.

The Payette River corridor would be managed as a Special Recreation Management Area. The Payette River would not be recommended for National Wild and Scenic Rivers study.

This alternative would have little impact on the local economy. Total crop agriculture earnings and employment would increase by \$965,100 and 45 jobs. These are both less than one-tenth of one percent of the 1983 RMP

area earnings and employment. Earnings and employment in the livestock industry would be unchanged from the existing situation. The capital value of AUMs would be reduced by \$0.4 to \$1.5 million. There would be no change in the recreation-related earnings and employment. There would be no change from the existing situation in lumber and wood products earnings and employment. Project costs needed to implement this alternative would be \$442,000.

Alternative B

The emphasis in this alternative is on an intermediate level of development and a higher intensity of management than our current management level. The objective of the alternative would be to emphasize the use and development of public land resources, especially commodity resources such as livestock grazing, timber harvest, mineral and energy development, etc. Management would favor higher livestock use levels, more range improvements, more timber and other forest product offerings, increased land disposal for agricultural development and increased transfer of isolated or difficult to manage parcels out of federal ownership.

Land tenure adjustments would include a maximum of 41,415 acres considered for transfer. Utility rights-of-way would be restricted on 6,627 acres.

Broad based soil erosion would increase an average of 5% over current levels. Substantial wind blown soil erosion could occur on 1,486 acres identified for agricultural development transfer. Erosion from timber harvest activities would occur on 150-700 acres annually.

Livestock use would reach 71,076 AUMs at the end of 20 years. This would be a 7% increase from current levels. The adjustment includes losses due to land transfers and special designations and increases due to rangeland developments.

Rangeland condition would show long term improvement on 18 to 23% of the area.

One wild horse herd would be eliminated and one herd would be managed to support 20 animals at the end of 20 years.

Mule deer and elk habitat would improve mainly due to seedings to support 25% population increases. Other wildlife habitats would generally show a slight improvement.

Riparian habitat would improve on 9 miles due to habitat improvement projects and reduced livestock grazing and would decline on 12 miles due to increased livestock use. AMP revisions and new starts would benefit 176 miles of riparian habitat.

Habitat improvement projects would improve 10 miles of aquatic habitat. Twelve miles would be degraded due to increased livestock use. New and revised AMPs would benefit 178 miles of aquatic habitat.

Fire management costs would increase 5% to \$115,000 annually.

Mineral activity would be open on 94% of the resource area for locatable and leasable minerals. Withdrawals would total 31,177 acres for leasables and 31,185 acres for locatables.

Motorized recreation would be open on 70% of the area, limited on 30%, and closed on less than 1%.

Eight cultural resources sites would be nominated to the National Register of Historic Places.

Six Research Natural Areas would be designated totaling 1,215 acres. Candidate and sensitive plants would be protected on these areas through managing livestock use, ORV use, and rights-of-way.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed towards long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 25,642 acres of commercial forest land. The annual harvest would be 1.7 million board feet. Timber harvest would occur on up to 14,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Total crop agriculture earnings and employment would increase by \$1,405,800 and 65 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$6.7 million and 308 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$7.6 million and employment of 354 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.9 million.

Alternative C

The objective of this alternative is to emphasize the protection and enhancement of the natural environment. Preservation of natural systems and nonconsumptive resource uses would be favored. Management would comply with the more stringent environmental protection standards. Wildlife and dispersed and nonmotorized recreation would be emphasized.

Land tenure adjustments would include a maximum of 17,324 acres considered for transfer. This total would include 5,108 acres of commercial forest land. Utility rights-of-way would be restricted on 11,966 acres. No lands would be transferred for agricultural development.

Broad based erosion rates would show an average decrease of 20% from current levels. Soil erosion from timber harvest activities would occur on 50 to 200 acres annually of commercial forest lands.

Livestock use would decline to 53,643 AUMs in 20 years. This decrease of 19% would occur due to land transfers, special designations, and decreases for watershed, range condition enhancement, and wildlife. Also included are increases due to livestock management, rangeland projects, and vegetative manipulation.

Rangeland condition would show a long term improvement on 20 to 25% of the area.

Two wild horse herds, one at 20 and one at 30, totaling 50 animals, would be maintained at the end of 20 years.

Changes in habitat condition would be expected to support a 35% increase in mule deer and elk populations. Other wildlife species would also be expected to increase due to better habitat conditions.

Reduced livestock stocking levels and riparian habitat improvement projects would improve riparian habitat along 12 stream miles. Increased livestock stocking levels would decrease habitat on 3 miles. New and revised AMPs would benefit 140 miles of riparian habitat.

Aquatic habitat would improve on 23 miles due to reduced stocking levels and aquatic habitat improvement projects. New and revised AMPs would benefit 142 miles of aquatic habitat.

Fire management costs would be about \$109,300 annually, the same as present costs.

Mineral activity would be open on 93% of the area for both leasable and locatable minerals. Withdrawals would total 33,077 acres for leasables and 34,700 acres for locatables.

Motorized recreation would be limited on about 99% of the area, open on less than 1%, and closed on less than 1% of the area.

Eight cultural sites would be nominated to the National Register of Historic Places.

Six Research Natural Areas would be designated totaling 1,215 acres. Candidate and sensitive plants would be protected on these areas through management of livestock, mineral development, rights-of-way, and ORV use.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 20,026 acres of suitable commercial forest land. The annual harvest would be 1/2 million board feet. Timber harvest would occur on up to 4,000 acres over 20 years.

Fourteen miles along the North Fork and South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

The Box Creek area would be designated and managed as an Outstanding Natural Area.

The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$5.1 million and 235 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$5.8 million and employment of 266 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$257,500 and 13 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.6 million.

Alternative D

This alternative is based on a high investment management option.

The alternative would increase the intensity of management of both commodity and noncommodity resources. Grazing opportunities, timber production and developed recreation would receive major investments. Higher investments would also be made for the improvement of wildlife habitat (terrestrial and riparian) and recreation opportunities of a dispersed nature.

A major effort would be made to control the invasion of medusahead rye into native vegetative areas and to reclaim infested areas that have high productive capability.

Land tenure adjustments would include a maximum of 32,727 acres considered for transfer. Utility rights-of-way would be restricted on 9,706 acres.

Broad based erosion rates would increase 10% over current levels. Wind blown soil erosion could substantially increase on 560 acres proposed for transfer for agricultural development. Soil erosion associated with timber harvest would occur on 200 to 1,200 acres annually.

Livestock use would increase 15% to 76,613 AUMs in 20 years. This increase would take into account decreases from land transfers and special designations and increases from rangeland improvements and vegetative manipulation.

Rangeland condition would show long term improvement on 14 to 19% of the area.

One wild horse herd would be eliminated and one would be managed to support 20 animals at the end of 20 years.

Elk and mule deer habitat would improve and be able to support a 20% population increase. Other wildlife habitats and populations would remain about the same or improve slightly.

Habitat improvement projects and reduced livestock use would improve 11 miles of riparian habitat. Increased livestock use would reduce riparian habitat along 17 stream miles. New and revised AMPs would benefit 204 miles of riparian habitat.

Aquatic habitat conditions would improve along 10 stream miles due to improvement projects and decrease along 14 stream miles due to increased livestock use. New and revised AMPs would benefit aquatic habitat along 206 stream miles.

Fire management costs would increase 5% to \$115,000 annually.

Mineral activity would be open on 93% and 94% of the area for locatable and leasable minerals, respectively. Withdrawals of 31,177 acres and 32,800 acres for leasables and locatables would apply.

Motorized vehicle use would be limited on 99% of the area, open on less than 1%, and closed on less than 1%.

Eight cultural sites would be nominated to the National Register of Historic Places.

Six areas totaling 1,215 acres would be designated as Research Natural Areas. Restrictions on livestock grazing, mineral activity, rights-of-way, and ORVs would protect candidate and sensitive plants on these areas.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 25,347 acres of suitable commercial forest land. The annual harvest would be 2.9 million board feet annually. Timber harvest would occur on up to 24,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

The Box Creek area would be designated and managed as an Outstanding Natural Area.

Total crop agricultural earnings and employment would increase by \$529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$6.9 million and 318 jobs. These are both less than one-half of one percent of the RMP area earnings and employment. The 20-year stocking level would lead to total earnings of \$8.2 million and employment of 382 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the

multiplier effect) lumber and wood product earnings and employment would be \$1.5 million and 77 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$2.5 million.

Alternative E (Preferred Alternative)

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use.

The planning decisions for recreation and wildlife in the Boise Front and Black Canyon MFPs would be unchanged and protection of the habitat area for long-billed curlews would be maintained the same as in all alternatives.

Land tenure adjustments would include a maximum of 17,524 acres considered for transfer. Utility rights-of-way would be restricted on 6,696 acres.

Broad based erosion rates would increase 2% over current levels. Wind blown soil erosion could increase substantially on 480 acres proposed for agricultural development. Timber harvest activities on 100 to 400 acres annually would also contribute to soil losses.

Livestock use would reach 70,536 AUMs in 20 years. This would be a 6% increase over current levels. Livestock AUM losses would be attributed to land transfers and special designations. Livestock use increases would come from land treatments, management practices, and range improvement projects.

Rangeland condition would show a long term improvement on 22 to 27% of the area.

One wild horse herd would be eliminated and one herd would be managed for 20 animals at the end of 20 years.

Improved habitat condition would support an increased population of 22% for elk and 33% for mule deer. Other wildlife species would also benefit in this alternative.

Reduced livestock use and habitat improvement projects would improve riparian habitat along 16 stream miles. Increased livestock use would reduce habitat condition along 4 stream miles. New and revised AMPs would benefit riparian habitat condition along 142 stream miles.

Aquatic habitat improvement projects would improve condition along 14 stream miles. New and revised AMPs would benefit aquatic habitat on 142 stream miles.

Fire management costs would increase about 3% to \$112,000 annually.

Mineral activity would be open on 94% of the area for both leasable and locatable minerals. Withdrawals would total 31,177 acres for leasables and 31,185 acres for locatables.

Motorized recreation would be open on 53% of the area, limited on 47%, and closed on less than 1% of the area.

Eight cultural resource sites would be nominated to the National Register of Historic Places.

Six Research Natural Areas would be designated totaling 1,215 acres. Candidate and sensitive plants would be protected in these areas through management of mineral development, livestock use, rights-of-way, and ORVs.

Three Areas of Critical Environmental Concern would be designated totaling 77,200 acres. Management emphasis would be directed toward long-billed curlew, Columbian sharp-tailed grouse, mule deer, and recreation.

Forest management would occur on 26,663 acres of suitable commercial forest land. The annual timber harvest would be 1 million board feet. Timber harvest would occur on up to 8,000 acres over 20 years.

Eight miles along the South Fork of the Payette River would be recommended for study for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Total crop agriculture earnings and employment would increase by \$454,000 and 21 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$7.2 million and 333 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$7.7 million and employment of 357 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$515,000 and 26 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.8 million.

PART II

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CHAPTER 1

INTRODUCTION

Purpose and Need

The Cascade Resource Management Plan (RMP) is being prepared to provide the Bureau of Land Management, Boise District Office with a comprehensive framework for managing 487,466 acres of BLM-administered public land over the next 20 years.

The public lands contain abundant natural resources and provide multiple benefits to the people of the United States such as: watershed, habitat of fish and wildlife, wild horses, cultural and paleontological resources, scenic and open space resources, opportunities for a wide variety of recreational activities, timber, minerals and energy, and forage for domestic livestock. The public lands also serve needs of local communities under the Recreation and Public Purposes Act, provide rights-of-way for public utilities, and may be available for agricultural development, as well as sales and exchanges when in the national interest.

Growing populations, advanced technology, and expanding economic demands are focusing increasing pressures on the public lands. Recognizing the need to respond to these pressures, Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA) directing the BLM to develop comprehensive land use plans for the management, use, and protection of the public lands (Sections 201 and 202).

The basic purpose of this plan is to ensure that public lands will be planned and managed in accordance with FLPMA, under the principles of multiple use and sustained yield and other principles as outlined in BLM planning regulations (43 CFR 1600). A second purpose is to ensure that the plan is responsive to the major issues described in Part I and achieves an equitable and proper balance of resource use and protection as determined through public participation, consultation, coordination, and cooperation.

This part of the document is the environmental impact statement (EIS) which addresses five alternative plans and identifies one alternative as the BLM's preferred alternative. The alternatives address key public land issues identified through public participation.

This document also serves as the instrument to satisfy the 1975 U.S. District Court approved agreement (Case #1983-73) between BLM and the Natural Resources Defense Council, et al., in which BLM agreed to consider the impacts of various intensities of livestock grazing in its decision making process.

This EIS provides an environmental analysis of the draft RMP which may be referenced for future activity planning and project implementation associated with the RMP. The EIS further satisfies the intent of the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act of 1969 (NEPA), 40 CFR Part 1500. The

intent of the CEQ regulations is to "ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken."

Description of Planning Area

The Cascade Resource Area is located within the administrative boundary of the Boise District. It is situated in west-central Idaho. The Resource Area is defined by the Snake River on the west and southwest; the Boise and Payette National Forest boundaries on the east; the northern line of Adams County on the north; and the Boise River-New York and Mora Canals - Ada/Canyon County line on the southeast.

The Resource Area encompasses a land base of approximately 2.77 million acres. This land includes all or portions of Ada, Adams, Boise, Canyon, Gem, Payette, Valley and Washington Counties. Land ownership consists of public lands (487,466 acres), State of Idaho (183,000 acres) and private (2.10 million acres). In general, the 487,466 acres of public lands administered by BLM consist of scattered, unconsolidated tracts intermingled with the state and private lands.

The Cascade Resource Area is the most heavily populated in the Boise District, if not the state. According to the "1980 Census of Population," issued 6/83, approximately 305,000 people or 32% of Idaho's population reside in the Resource Area. The majority of these people are located within the Treasure Valley in the cities of Boise, the state's capital and largest city, Nampa and Caldwell. Other cities located in the Resource Area include Emmett, Payette, Weiser, McCall, Cascade, Horseshoe Bend, Council and Cambridge.

CHAPTER 2

ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE

INTRODUCTION

The development of the alternatives for the Cascade Resource Management Plan was guided by the regulations of the National Environmental Policy Act (NEPA), the BLM resource management planning regulations and the Idaho Guidebook for preparing the RMP. These guidances require that alternatives be developed that addressed each issue. Of the alternatives developed, one alternative is a no action alternative which means a continuation of present levels of resource use. This alternative satisfies the requirement of BLM planning regulations (43 CFR 1610.4-5).

The basic goal for developing alternatives for the RMP was to prepare different combinations of resource use that addressed each issue and management concern. A range of resource utilization levels or intensities of management was developed for those resources that were issue related. Non-issue related resources only had minor or no differences in use levels or management intensity between the alternatives.

Each alternative had to satisfy standards (criteria) as outlined in the "Idaho Guidebook." These standards stated that each alternative must be a complete resource management plan for the public lands within the planning area and must:

- be reasonable;
- include multiple use and transfer area designations, all the resource management guidelines and goals, resource management objectives and required actions;
- provide for a certain level of resource protection, management use and development;
- be responsive to the issues (each issue must be addressed in at least one alternative or subalternative); and
- meet BLM requirements (all required alternatives for range, wilderness, or other programs must be incorporated in at least one alternative or subalternative).

ALTERNATIVES

There are five alternatives developed in this document. Alternative E has been selected as the Preferred Alternative. All alternatives respond to the planning questions that have been asked about the respective issues. Each alternative has categorized the public lands into one of four multiple use and transfer classes. The classes are discussed below.

Multiple Use and Transfer Classes

Each alternative will have its public lands assigned to one of these three multiple use or transfer classes: moderate use class, intensive use class, limited use class, or transfer class.

Multiple use and transfer classes serve two purposes in this plan. The first is to describe overall resource opportunities and constraints by indicating what level of resource production and use is appropriate, what intensity of management is needed, whether there are sensitive and significant resources which must be protected, and whether BLM would transfer public lands from its jurisdiction. The second is to provide a basis for developing specific resource management objectives and actions for each multiple use area with general purpose and policy statements.

Prior to undertaking or approving any proposed resource management action on public lands in the Resource Area, BLM will ensure that such action is consistent with the purpose and policies of the multiple use or transfer class or classes involved and that adequate public involvement is obtained.

Public lands are placed in the multiple use or transfer class that best reflects the specific resources and management priorities for the area. The purposes of these classes are described below and to a greater degree, in Part I page 18 of the Plan.

Moderate Use Class

Purpose - The purpose of a moderate use class is to delineate public lands which are suitable for a wide variety of existing and potential uses.

Intensive Use/Development Class

Purpose - The purpose of an intensive use/development class is to delineate areas suitable for large scale, intensive use and development such as developed recreation, communication or power sites.

Limited Use Class

Purpose - The purpose of a limited use class is to delineate public lands where strict environmental controls are required to protect sensitive and significant resources.

Transfer Class

Purpose - The purpose of a transfer class is to delineate public lands which may be considered for transfer out of federal ownership. The transfer class is divided into five categories: Sale (T1), Sale or Exchange (T2), Exchange (T3), Agricultural Entry (T4), and Commercial Forest Lands (T5).

ALTERNATIVES IN DETAIL

The following section describes the formatting used to present all five alternatives developed for the Cascade RMP. The format for the presentation of the alternatives is as follows: goal, resource activity, management objectives, management actions and special considerations. The activities that relate to the issues are addressed in the following sequence:

| | | | |
|------------------------------------|-----------|--------|-----------------------------------|
| Livestock Resources | | | |
| Watershed Resources | | Issue: | Rangeland |
| Vegetative Resources | relate to | | Resource Management |
| Wildlife Resources | | | |
| Riparian & Aquatic Resources | | | |
| Lands and Realty | relate to | Issue: | Land Tenure Adjustment |
| Recreation Resources | relate to | Issue: | Payette River Corridor Management |
| Cultural & Paleontologic Resources | | | Management Concerns |
| Forest Resources | relate to | | and general |
| Mineral Resources | | | management |
| Off-Road Vehicles | | | |

This format is used to assist the reviewer in comparing and tracking the differences between the alternatives and to see how the issues are handled. The Preferred Alternative appears in both Part I (The Plan) and Part II (DEIS).

ALTERNATIVES

OBJECTIVES/ACTIONS COMMON TO ALL ALTERNATIVES

The following planning decisions from the approved Boise Front and Black Canyon management framework plans (MFPs) would apply to all alternatives:

Boise Front MFP

Recreation

Vehicular use on public land would be restricted to designated roads and trails as identified on the MFP Step II overlay. Highland Valley Road and Shaw Mountain Road would be closed to vehicular travel from December 15 to April 1 for deer winter range protection.

Black Canyon MFP

Recreation Off-Road Vehicles

Open ORV use areas identified on Map 2-4 are: 1) Little Gem Cycle Park, and 2) Parma and Dewey ORV parks. Limited ORV use would restrict motorized vehicles to existing roads and trails throughout the remainder of the planning unit.

Wildlife

A long-billed curlew habitat area has been identified in the Black Canyon Planning Unit with management guidelines that include retention of the area in federal ownership, ORV restrictions, litter control, maintenance of short grass types and development of the habitat management plan.

Description of Alternatives

The following objectives and actions would apply to all alternatives:

Watershed

Objectives

Improve or maintain the condition of annual and native ranges.

Protect high erosion hazard (HEH) areas and the banks of streams, lakes and reservoirs.

Actions

Prevent or control surface disturbing activities on soils with high or very high soil erosion hazard ratings.

Seed disturbed areas (burn or mechanical) with selected plant species.

Limit ORV activity in most areas of High Erosion Hazard (HEH) potential to existing or designated roads and trails.

Establish grazing management systems for critical HEH areas.

Limit mechanical rangeland treatments in HEH areas.

Wildlife

Objectives

Protect crucial habitat of federal and state listed "endangered, threatened or sensitive" species.

Protect crucial habitat of big game and upland game bird species.

Actions

Allow no disturbance during crucial time periods (see special stipulations).

Initiate special management for crucial habitat areas.

Riparian and Aquatic

Objectives

Protect stream, lake and reservoir banks from disturbance, erosion or pollution.

Actions

Provide buffer zones along stream banks and implement guidelines for activities occurring within this zone.

Lands and Realty

Objectives

Optimize public use and management of the public lands under the principles of multiple use and sustained yield.

Actions

Remove unneeded withdrawals on public lands.

Provide opportunities for utility rights-of-way. Encourage future rights-of-way to be located within or adjacent to existing rights-of-way. Restrict rights-of-way in areas with high resource values.

Cultural Resources

Objectives

Protect cultural resources.

Actions

Design and locate projects to minimize impacts.

Salvage those sites where avoidance is not practical. Consult with the SHPO on possibly significant sites.

Paleontologic

Objectives

Protect paleontologic values found on public lands and ensure that they remain available for collection as appropriate.

Actions

Allow no mechanical disturbance (including fire equipment) on scientifically significant paleontologic sites.

Collection of vertebrate fossils will be by permit only for professional use.

Allow no surface occupancy (leasable minerals) on sites with known paleontologic values.

Surface or subsurface ROWs will be designed and routed to avoid paleontologic sites.

ORV activity will be limited to existing roads and trails on known paleontologic sites.

Description of Alternatives

Recreation

Objectives

Provide for a variety of recreation opportunities.

Action

Continue management of intensive use areas for ORV activities, boat launching, and camping.

Continue to make all lands available for casual, dispersed recreation use.

Visual

Objectives

Protect the scenic values of public lands, particularly along the Payette River Scenic Route and along the South Fork of the Payette River.

Manage 81,000 acres under Class II, 383,466 acres under Class III and 23,000 acres under Class IV VRM guidelines.

Actions

All land manipulation (burns, seeding, timber harvest, etc.) or project development (fences, transmission towers, etc.) will be designed to have no or minimal visual impacts (blend into setting) particularly along the Payette River (all forks).

Fire

Objectives

Protect the public resources from damages due to wildfire (natural or human caused).

Use prescribed fire to help meet livestock and wildlife objectives.

Reduce frequency of and potential for fire, especially human-caused uncontrolled wildfire.

Rehabilitate all burned areas where feasible.

Actions

Take full suppression action on all fires. High intensity suppression actions will be taken where fire danger is rated as extreme, or when high resource values are threatened. Schedule prescribed fire to improve vegetative production or wildlife habitat.

Pursue an aggressive prevention program.

Give full consideration to wildlife and livestock needs when rehabilitating burned areas.

Create buffer strips (greenstripping) utilizing vegetative species resistant to fire spread. Buffer strips would be established to reduce fire size and occurrence on large expanses of annual grasses. Strips would also be used to protect remaining valuable brush habitat.

Minerals

Objectives

Insure that energy and nonenergy minerals development is encouraged in a manner that satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation practices.

Actions

Continue to allow energy and nonenergy mineral leasing and development.

Work with mining claimants to minimize or eliminate adverse environmental impacts.

Encourage the use of existing materials sites as needed and allow new sites to be developed in an environmentally sound manner.

ALTERNATIVE A

This alternative reflects the continuation of present management practices and programs now occurring on the public lands in the resource area. Changes to present stocking levels, land sales or exchanges, etc. would be handled on a case by case basis as most of the objectives and actions of the current MFPs have been accomplished. This alternative is the "no action" alternative.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|---------|-----------------|-------|-----------------|
| 416,641 | acres Moderate, | 3,401 | acres Intensive |
| 64,744 | acres Limited, | 2,680 | acres Transfer |

Livestock Resources

Objectives

Manage 461,686 acres of rangeland to provide forage for livestock and wild horses.

Maintain current condition of rangeland vegetation.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
66,014 5 yr., 66,014 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 10 20 yr.
 West Crane Creek 12 Initial, 12 20 yr.

Wild Horses-AUMs: 20 yrs.: 4 Mile 120; West Crane Creek 144

Actions

Stock Driveways: 63,000 existing maintained, 0 existing eliminated
 (acres) 0 new added, 63,000 total available

Vegetative Manipulation:

5 yrs - 0 acres burn, spray and/or seed; 0 acres disc and seed
 20 yrs - 0 acres burn, spray and/or seed; 0 acres disc and seed

Projects: 12 mi. fence, 4 water developments, 6 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
0 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures used to rehabilitate wildfires will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate and sensitive plants.

Protect and manage 12 specific sites containing candidate and sensitive plants.

Maintain the existing condition of rangeland vegetation.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Adjust livestock grazing practices in allotments that could shift to a lower condition class if present practices were to continue.

Protect candidate and sensitive plants in areas being managed for other uses that threaten the plants existence (i.e. mining) through mitigation.

Description of Alternatives

Designate and/or manage 12 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW Avoidance (acres) | | | ORV Use (acres) | | |
|-----------------------------------|----------------------|-------|------------------|-----------------|-------------|-----------------------|------|-----|-----------------|-----|---|
| | | | Locatable | Leasables | | 0 | Surf | Sub | 0 | L | C |
| | | | | With- drawal | Clo- sed | No Surf. | | | | | |
| 1. Lost Basin Grassland <u>1/</u> | RNA | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 |
| 2. Rebecca Sandhill <u>1/</u> | RNA | 410 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 410 | 0 |
| 3. Sand Hollow <u>2/</u> | --- | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 500 | 0 |
| 4. Summer Creek <u>2/</u> | --- | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 |
| 5. Paraphyllum Rock | --- | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 |
| 6. Beacon Hill | --- | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| 7. Sagebrush Hill | --- | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| 8. Buckwheat Flats | --- | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 |
| 9. 4th July Meadow | --- | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 |
| 10. Sand Capped Knob | --- | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 |
| 11. Goodrich Creek <u>1/</u> | --- | 440 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 440 | 0 |
| 12. Pearl Site | --- | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 0 |

1/ Exclude or limit livestock grazing.

2/ No water or salt blocks in area or on ridgeline.

Projects: 1 area to have plants removed for replanting (site 12 above)
6 mi. fencing
2 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known. Prepare two Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 186,300 acres of elk habitat, 281,500 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations.

Manage 186,900 acres of sage grouse habitat to maintain existing brooding and nesting habitat.

Provide special management to maintain 61,000 acres of curlew habitat through implementation of the HMP. Improve 4,200 acres of sharp-tailed grouse habitat by developing and implementing an HMP on the Sage Creek allotment.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|---------------------------|-----------------------------|
| Wildlife Unit Months: | 5,516 Elk, | 29,420 Deer, | 600 Antelope |
| Expected Population: | <u>143</u> yearlong Elk, | <u>694</u> yearlong Deer, | <u>50</u> yearlong Antelope |
| | <u>950</u> winter Elk, | <u>5,890</u> winter Deer | |

Actions

Vegetative Manipulation: 0 acres Shrub, Grass & Forb Seeding,
0 acres Burn, Disc & Seed, 0 acres Interseed,
0 acres Special Project Seeding

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 11 stream miles of riparian habitat. Continue present management on 106 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 67 miles of aquatic habitat.

Actions

Establish riparian pastures and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 14 mi. fencing, 11 mi. instream work
18 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 2,680 acres of public lands (243 acres through sale (T1); 1,397 acres through sale or exchange (T2); 0 acres through exchange; and classify 1,040 acres for potential DLE development). Retain 484,786 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Description of Alternatives

Cultural Resources

Objective

Protect, through standard operating procedures, areas with significant cultural values.

Actions

Manage nine cultural sites as shown below:

| Sites | Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|-------------------|-------|------------------|-----------|---------|------------|----|----|------------|-----|---|
| | | Locatables | Leasables | | Avoidance | | | (acres) 4/ | | |
| | | Withdrawal | Closed | No Surf | (acres) 1/ | 2/ | 3/ | 0 | L | C |
| 1. Placerville | | | | | | | | | | |
| Townsite 2/ | 8 | 8 | 0 | 0 | 0 | 3/ | 3/ | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 386 | 0 |
| 7. Centerville | 516 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 516 | 0 |
| 8. Pioneererville | 581 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 581 | 0 |
| 9. Mineral | 429 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 429 | 0 |

1/ 0 = Overhead; S = Surface; Sub = Subsurface.

2/ National Register of Historic Places (existing).

3/ Acreage to be determined by National Register determination process (reevaluation).

4/ 0 = Open; L = Limited; C = Closed.

Projects: 0 mi. fencing

Activity Plans: 0

Recreation Resources

Objectives

Provide or enhance recreation at 20 areas.

Provide for ORV recreation activity on public lands.

Actions

ORV recreation activity is open on 363,142 acres, limited on 123,739 acres and closed on 585 acres. ORV recreation activity will remain open on 680 acres, and limited on 2,000 acres proposed for transfer until lands are transferred.

Designate and manage 20 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|--|----------------------|---------|------------------|-----------------|------------|-----------------------------|---------|-----|----------------|--------|-----|
| | | | Locat- ables | Lease- ables | No Surf | 0 | Surf | Sub | 0 | L | C |
| | | | With- drawal | Clo- sed | | | | | | | |
| 1. Cascade Uplands <u>3/</u> | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 328,790 | 1,261 | 0 |
| 2. Weiser River Launch | Boat | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak | Cycle Park | 948 | 0 | 0 | 0 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow <u>5/</u> Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | 4/ 0 | 0 | 0 | 39,777 | 0 |
| 5. Wild Horse | Camp-ground | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 2 |
| 6. Steck | Camp-ground | 11 | 0 | 0 | 0 | 11 | 11 | 0 | 0 | 0 | 11 |
| 7. Weiser Dunes | Play Area | 200 | 0 | 0 | 0 | 0 | 200 | 0 | 200 | 0 | 0 |
| 8. Snake River Launch | Boat | 10 | 0 | 0 | 0 | 10 | 10 | 0 | 0 | 10 | 0 |
| 9. Payette River <u>6/</u> Corridor | SRMA | 19,000 | 0 | 0 | 0 | 0 | 2,600 | 0 | 16,384 | 2,600 | 0 |
| 10. North Fork | Camp-ground | 10 | 0 | 0 | 0 | 10 | 10 | 0 | 0 | 0 | 10 |
| 11. Garden Valley | Boat Launch | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 |
| 12. South Fork | Camp-ground | 3 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 3 |
| 13. Chief Parish | Picnic Site | 2 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 2 |
| 14. Boise Front <u>7/</u> | SRMA | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 15. Hulls Gulch | Interprt Trail | 5 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| 16. Treasure Valley <u>8/</u> | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 9,604 | 58,856 | 0 |
| 17. Little Gem | Cycle Park | 3,000 | 0 | 0 | 0 | 0 | 0 | 0 | 2,100 | 900 | 0 |
| 18. Dewey | Play Area | 30 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 0 | 0 |
| 19. Parma | Play Area | 10 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 |
| 20. Pickles Butte | Play Area | 500 | 0 | 0 | 0 | 0 | 500 | 0 | 500 | 0 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

2/ 0 = Open; L = Limited; C = Closed.

3/ Specific constraints covered under Weiser River and Clay Peak.

4/ Except for Electrical Transmission towers within Existing ROW.

5/ Covered under Snake River, Steck, Weiser Dunes and Wild Horse.

6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parish.

7/ Specific constraints covered under Hulls Gulch.

8/ Specific constraints covered under Little Gem, Dewey, Parma and Pickles Butte.

Description of Alternatives

Projects: Water and/or Sanitary facilities 6, launch ramp 3, access 6

Activity Plans: Interagency Cooperative Management Plan, RAMPs for Payette River Corridor, Boise Front, and Oxbow Brownlee SRMAs.

Analyze the Box Creek WSA (110-91A) for wilderness suitability through a statewide EIS. Consider the USFS (Payette National Forest) recommendations for the adjacent roadless area called Lick Creek (WSA 4-455).

Forest Resources

Objectives

Manage 26,686 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,209 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal and 70 acres for seed orchard withdrawal.

Provide an annual harvest of 1.0 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 40 mi. of forest access road (2 miles annually)

Acquire access to one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 100-400 acres annually.

Mineral Resources

Objectives

Make 456,289 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available saleable minerals from three material sale sites and 16 free-use permit sites as needed.

Actions

| Leasables (acres) | | | Locatables (acres) | | Salables (acres) | |
|-------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 456,289 | 31,177 | 78 | 456,289 | 31,177 | 95 | 0 |

ALTERNATIVE B

The emphasis in this alternative is on an intermediate level of development and a higher intensity of management than our current management level.

The objective of the alternative would be to emphasize the use and development of public land resources, especially commodity resources such as livestock grazing, timber harvest, mineral and energy development, etc. Management would favor higher livestock levels, more range improvements, more timber and other forest product offerings, increased land disposal for agricultural development and increased transfer of isolated or difficult to manage parcels out of federal ownership.

Management would comply with minimal standards acceptable for environmental protection while still operating within the framework of multiple-use and sustained yield (guidance common to all alternatives).

Motorized vehicle access and related recreation use would receive priority over primitive/dispersed recreation. Minimal restriction would be placed on ORVs.

The Payette River (8 miles-South Fork) would be recommended for National Wild and Scenic Rivers study as a recreation river. Opportunities for increased river use (float and power boating) would be encouraged and provided for.

The Four Mile Wild Horse Herd Area would be the only herd area managed.

Areas of special interest or fragile environments would be given special designation such as Research Natural Area and ACEC.

The 487,466 acres of public land would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|----------------|-----------------|---------------|-----------------|
| <u>374,873</u> | acres Moderate, | <u>3,401</u> | acres Intensive |
| <u>67,777</u> | acres Limited, | <u>41,415</u> | acres Transfer |

Livestock Resources

Objectives

Manage 425,144 acres of rangeland to provide forage for livestock and wild horses.

Livestock AUMs: 72,571 Active Pref., 66,424 Licensed
61,872 5 yr., 71,076 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
 West Crane Creek 12 Initial, 0 20 yr.

Wild Horses-AUMs: 20 yrs: 4 Mile 240; West Crane Creek 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:

5 yrs - 6,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
20 yrs - 23,400 acres burn, spray and/or seed; 3,000 acres disc'd & seed

Projects: 148 mi. fence, 20 water developments, 12 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
18 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed ResourcesObjectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative ResourcesObjectives

Protect candidate and sensitive plants.

Protect and manage 12 specific sites containing candidate and sensitive plants.

Improve the general condition on 28% of all fair condition and 8% of all good condition rangeland.

Change or improve condition on 25% of the poor condition rangeland and maintain existing condition on all other rangelands.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Description of Alternatives

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants.

Adjust livestock grazing practices in allotments that could shift to a lower condition class if present practices were to continue.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 12 areas as shown:

| Sites | Special Designations | Minerals (acres) | Locat-ables | | | Lease-ables | | | ROW Avoidance (acres) 3/ | | | ORV Use (acres) | | |
|----------------------------|----------------------|------------------|-------------|-------|---|-------------|---|---|--------------------------|------|-----|-----------------|---|---|
| | | | With-drawal | | | Clo-sed | | | No Surf | | | O L C | | |
| | | | Types | Acres | | | | | O | Surf | Sub | O | L | C |
| 1. Lost Basin Grassland 1/ | RNA | 65 | | 0 | 0 | 0 | 0 | 0 | 65 | 65 | 0 | 65 | 0 | 0 |
| 2. Rebecca Sandhill 1/ | RNA | 410 | | 0 | 0 | 0 | 0 | 0 | 410 | 410 | 0 | 410 | 0 | 0 |
| 3. Sand Hollow 2/ | --- | 500 | | 0 | 0 | 0 | 0 | 0 | 500 | 500 | 0 | 500 | 0 | 0 |
| 4. Summer Creek 2/ | RNA | 200 | | 0 | 0 | 0 | 0 | 0 | 200 | 200 | 0 | 200 | 0 | 0 |
| 5. Peraphyllum Rock | RNA | 40 | | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 0 | 40 | 0 | 0 |
| 6. Beacon Hill | --- | 20 | | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 20 | 0 | 0 |
| 7. Sagebrush Hill | --- | 10 | | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 0 | 10 | 0 | 0 |
| 8. Buckwheat Flats | RNA | 60 | | 0 | 0 | 0 | 0 | 0 | 60 | 60 | 0 | 60 | 0 | 0 |
| 9. 4th July Meadow | --- | 100 | | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 0 | 100 | 0 | 0 |
| 10. Sand Capped Knob | --- | 40 | | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 0 | 40 | 0 | 0 |
| 11. Goodrich Creek 1/ | RNA | 440 | | 0 | 0 | 0 | 0 | 0 | 440 | 440 | 0 | 440 | 0 | 0 |
| 12. Pearl Site | --- | 400 | | 0 | 0 | 0 | 0 | 0 | 400 | 400 | 0 | 400 | 0 | 0 |

1/ Exclude or limit livestock grazing.

2/ No water or salt blocks in area or on ridgeline.

3/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

Projects: 6 mi. fencing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.
Prepare six Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 274,810 acres of deer habitat and 3,960 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 183,020 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 22,262 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 22,700 acres of Columbian sharp-tailed grouse habitats to improve populations of these threatened/sensitive species.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|---------------------------|-----------------------|
| Wildlife Unit Months: | <u>7,256</u> Elk, | <u>41,956</u> Deer, | <u>1,800</u> Antelope |
| Expected Population: | <u>188</u> yrlong Elk, | <u>913</u> yrlong Deer, | <u>100</u> yrlong |
| | <u>1,250</u> winter Elk, | <u>7,750</u> winter Deer, | Antelope |

Actions

Vegetative Manipulation: 9,764 acres Shrub, Grass & Forb Seeding
7,672 acres Burn, Disc & Seed
2,006 acres Interseed,
2,820 acres Special Project Seeding

Projects: 20 mi. fence, Guzzlers - 1

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer and elk (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of Columbian sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 9 stream miles of riparian habitat. Continue present management on 101 stream miles of riparian habitat.

Improve the condition of 10 miles of aquatic habitat and continue present management on 58 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Establish riparian pastures, grazing systems and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 10 mi. fencing, 6 mi. instream work
6 mi. of stream bank planting

Description of Alternatives

Lands and Realty

Objectives

Identify for transfer from federal ownership 41,415 acres of public lands (563 acres through sale (T1); 33,409 acres through sale or exchange (T2); 5,957 acres through exchange; and classify 1,486 acres for potential DLE/CA development (T4). Retain 446,051 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

| Sites | NR 1/ Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|----------------------------|----------------|------------------|-----------|---------|-----------|----|-----|------------|-----|---|
| | | Locatables | Leasables | | Avoidance | | | (acres) 2/ | | |
| | | Withdrawal | Closed | No Surf | O | S | Sub | O | L | C |
| 1. Placerville Townsite | 8 3/ | 8 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 386 | 0 |
| 7. Centerville | 516 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 516 | 0 |
| 8. Pioneererville | 581 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 581 | 0 |
| 9. Mineral | 429 | 4/ | 0 | 4/ | 0 | 4/ | 4/ | 0 | 429 | 0 |

1/ National Register of Historic Places.

2/ O = Overhead; S = Surface; Sub = Subsurface.

3/ National Register of Historic Places (existing).

4/ Acreage to be determined by National Register determination process.

5/ O = Open; L = Limited; C = Closed.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 19 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

ORV recreation activity is open on 340,791 acres, limited (to existing or designated roads and trails) on 146,090 acres and closed on 585 acres.

ORV recreation activity will remain open on the 31,695 acres and limited on 9,720 acres of lands proposed for transfer until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Description of Alternatives

Designate and manage 19 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|----------------------------------|----------------------|--------------------|------------------|-----------------|-------------|-----------------------------|-------------|-------|----------------|--------|-----|
| | | | Locat- ables | Lease- ables | No Surf. | With- drawal | Clo- sed | Sub. | 0 | L | C |
| | | | | | | | | | | | |
| 1. Cascade Uplands <u>3/</u> | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 306,566 | 26,921 | 0 |
| 2. Weiser River | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak | Cycle Park | 948 | 0 | 0 | 948 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow <u>5/</u> Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39,777 | 0 |
| 5. Wild Horse | Campground | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 6. Steck | Campground | 11 | 0 | 0 | 11 | 11 | 11 | 0 | 0 | 0 | 11 |
| 7. Weiser Dunes | Play Area | 200 | 0 | 0 | 200 | 0 | 200 | 0 | 200 | 0 | 0 |
| 8. Snake River | Boat Launch | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 10 | 0 |
| 9. Payette R. Corridor <u>7/</u> | SRMA/WSR | 19,000/ (8 mi.) | 2,600 | 0 | 2,600 | 2,600 | 2,600 | 2,600 | 16,384 | 2,601 | 0 |
| 10. North Fork | Campground | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 0 | 10 |
| 11. Garden Valley | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 12. South Fork | Campground | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 3 |
| 13. Chief Parrish | Picnic Site | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 14. Boise Front <u>8/</u> | SRMA/ACEC | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 15. Hulls Gulch | Interpret. Trail | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 |
| 16. Treasure Valley <u>9/</u> | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,960 | 0 |
| 17. Little Gem | Cycle Park | 3,000 | 0 | 0 | 0 | 0 | 500 | 0 | 2,100 | 900 | 0 |
| 18. Dewey | Play Area | 30 | 0 | 0 | 30 | 0 | 30 | 0 | 30 | 0 | 0 |
| 19. Parma | Play Area | 10 | 0 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.2/ 0 = Open; L = Limited; C = Closed.3/ Specific constraints covered under Weiser River and Clay Peak.4/ Except for Electrical Transmission Towers in Existing ROW.5/ Specific constraints covered under Snake River, Steck, Weiser Dunes and Wild Horse.6/ Exclude or limit livestock grazing.7/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.8/ Specific constraints covered under Hulls Gulch.9/ Specific constraints covered under Little Gem, Dewey and Parma.

Projects: Water and/or Sanitary facilities 6, launch ramp 3,
Access 6

Activity Plans: RAMPs for 3 SRMAs.

Forest Resources

Objectives

Manage 25,642 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 6,253 acres of forest lands under CFL set asides. This includes 4,923 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,240 acres for National Wild and Scenic Rivers System and 20 acres for campground withdrawal.

Provide an annual harvest of 1.7 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 68 mi. of forest access road (3.4 miles annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 150-700 acres annually.

Mineral Resources

Objectives

Make available 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Actions

| Leasables (acres) | | | Locatables (acres) | | Salables (acres) | |
|-------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 456,289 | 31,177 | 886 | 456,281 | 31,185 | 95 | 0 |

ALTERNATIVE C

The objective of this alternative is to emphasize the protection and enhancement of the natural environment. Preservation of natural systems and nonconsumptive resource uses would be favored.

Management would comply with the more stringent environmental protection standards.

Commercial forest lands identified for exchange (T5) would only be considered for exchange with lands in Idaho that contain such nationally significant resource values as wilderness, wild and scenic rivers, historic, cultural, paleontologic, endangered species habitat or crucial wildlife habitat that can be managed by the BLM or other commercial forest land of equal value that would improve BLM management.

Dispersed recreation activities would be encouraged instead of developed or motorized use. More restrictions would be placed on access to the public lands.

The Box Creek Wilderness Study Area would be designated and managed as an outstanding natural area.

The Payette River (14 miles) would be recommended for study as an addition to the National Wild and Scenic Rivers System as a recreation river. Float boat activity would be favored over power boat use, and access to the river would be limited. The maximum acreage authorized for protection under the National Wild and Scenic Rivers Act would be recommended for designation.

Areas of special interest or fragile environments would be given special designation such as Research Natural Areas and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|----------------|-----------------|---------------|-----------------|
| <u>339,518</u> | acres Moderate, | <u>3,401</u> | acres Intensive |
| <u>127,223</u> | acres Limited, | <u>17,324</u> | acres Transfer |

Livestock Resources

Objectives

Manage 459,824 acres of rangeland to provide forage for livestock and wild horses.

| | | | | |
|-----------------|---------------|---------------|---------------|----------|
| Livestock-AUMs: | <u>72,571</u> | Active Pref., | <u>66,424</u> | Licensed |
| | <u>47,345</u> | 5 yr., | <u>53,643</u> | 20 yr. |

| | | | | | |
|----------------------|------------------|-----------|----------|-----------|--------|
| Wild Horses-Numbers: | 4 Mile | <u>10</u> | Initial, | <u>20</u> | 20 yr. |
| | West Crane Creek | <u>12</u> | Initial, | <u>30</u> | 20 yr. |

| | | | | |
|-------------------|-------------------|------------|--------------------|------------|
| Wild Horses-AUMs: | 20 yrs. -- 4 Mile | <u>240</u> | ; West Crane Creek | <u>360</u> |
|-------------------|-------------------|------------|--------------------|------------|

Actions

Stock Driveways: 0 existing maintained, 63,000 existing eliminated
(acres) 0 new added, 0 total available

Vegetative Manipulation:

5 yrs - 3,000 acres burn, spray and/or seed; 1,500 acres disc'd & seed
20 yrs - 13,000 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 79 mi. fence, 9 water developments, 6 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate or sensitive plants.

Protect and manage 12 specific sites containing candidate and sensitive plants.

Improve general condition on 35% of all fair and 38% of all good condition rangeland.

Change or improve condition on 16% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 12 areas as follows:

| Sites | Special Designa- tions | Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|--------------------------------------|------------------------------|-------|------------------|-------------|-------------|--------------------|-----|-----|---------|-----|-----|
| | | | Locat- ables | Leasables | | Avoidance | | | (acres) | | |
| | | | With- drawal | Clo- sed | No Surf. | (acres) 1/ Surf | Sub | 0 | L | C | |
| 1. Lost Basin Grassland <u>2/</u> | RNA | 65 | 65 | 0 | 65 | 0 | 65 | 65 | 0 | 0 | 65 |
| 2. Rebecca Sandhill <u>2/</u> | RNA | 410 | 410 | 0 | 410 | 0 | 410 | 410 | 0 | 0 | 410 |
| 3. Sand Hollow <u>3/</u> | --- | 500 | 0 | 0 | 500 | 0 | 500 | 500 | 0 | 500 | 0 |
| 4. Summer Creek <u>3/</u> | RNA | 200 | 200 | 0 | 200 | 0 | 200 | 200 | 0 | 0 | 200 |
| 5. Paraphyllum Rock | RNA | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 6. Beacon Hill | --- | 20 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 20 | 0 |
| 7. Sagebrush Hill | --- | 10 | 0 | 0 | 10 | 0 | 10 | 10 | 0 | 0 | 10 |
| 8. Buckwheat Flats | RNA | 60 | 60 | 0 | 60 | 0 | 60 | 60 | 0 | 0 | 60 |
| 9. 4th July Meadow | --- | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 0 | 0 | 100 |
| 10. Sand Capped Knob | --- | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 11. Goodrich Creek <u>2/</u> | RNA | 440 | 440 | 0 | 440 | 0 | 440 | 440 | 0 | 0 | 440 |
| 12. Pearl | --- | 400 | 0 | 0 | 400 | 0 | 400 | 400 | 0 | 400 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

2/ Exclude or limit livestock grazing.

3/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing
5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.

Prepare six Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 185,080 acres of elk habitat, 276,890 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Description of Alternatives

Manage 186,900 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 22,700 acres of Columbian sharp-tailed grouse habitats to improve populations of these threatened/sensitive species.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|---------------------------|-----------------------|
| Wildlife Unit Months: | <u>7,836</u> Elk, | <u>45,312</u> Deer, | <u>2,400</u> Antelope |
| Expected Population: | <u>203</u> yrlong Elk, | <u>986</u> yrlong Deer, | <u>200</u> yrlong |
| | <u>1,350</u> winter Elk, | <u>8,370</u> winter Deer, | Antelope |

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding,
8,295 acres Burn, Disc & Seed,
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 10 mi. fence, 3 Guzzler

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; deer and elk on Boise Front and Oxbow Reservoir.

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 12 stream miles of riparian habitat. Continue present management on 107 stream miles of riparian habitat.

Improve the condition of 23 miles of aquatic habitat and continue present management on 57 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Establish riparian pastures, grazing systems, and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 13 mi. fencing, 9 mi. in stream work
15 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,324 acres of public lands (243 acres through sale (T1) and 5,775 acres through exchange (T3) and 11,306 acres through special exchange (T5)). Retain 470,142 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Lands identified T5 will only be available for exchange for lands determined to be of national significance, endangered or crucial wildlife habitat or commercial forest lands of equal or better value that would improve resources management of BLM lands. The total of 11,306 acres in this category includes 5,108 acres of commercial forest land.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

Description of Alternatives

| Sites | NR 1/ Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|-----------------|----------------|------------------|-----------|---------|------------|----|----|---------|------------|---|
| | | Locatables | Leasables | | Avoidance | | | ORV Use | | |
| | | Withdrawal | Closed | No Surf | (acres) 4/ | O | S | Sub | (acres) 5/ | |
| 1. Placerville | | | | | | | | | | |
| Townsite 2/ | 8 | 8 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 386 | 0 |
| 7. Centerville | 516 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 516 | 0 |
| 8. Ploneerville | 581 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 581 | 0 |
| 9. Mineral | 429 | 3/ | 0 | 3/ | 0 | 3/ | 3/ | 0 | 429 | 0 |

1/ National Register of Historic Places.

2/ National Register of Historic Places (existing).

3/ Acreage to be determined by National Register nomination process.

4/ O = Overhead; S = Subsurface; Sub = Subsurface.

5/ O = Open; L = Limited; C = Closed.

Projects: 5 mi. fencing

Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 21 areas.

Provide for ORV recreation activity on public lands.

Manage 4,500 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

ORV recreation activity is open on 3,276 acres, limited (to existing or designated roads and trails) on 481,800 acres and closed on 2,390 acres.

Manage 17,324 acres of public lands recommended for transfer as limited, to designated or existing roads and trails for ORV recreation, until lands are transferred.

Recommend the study of 14 miles of Payette River (6 miles North Fork, 8 miles South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Designate and manage 21 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|---|--------------------------|------------|------------------|-----------------|-------------|-----------------------------|-------|-------|----------------|---------|-----|
| | | | Locat- ables | Lease- ables | No Surf. | 0 | Surf | Sub. | 0 | L | C |
| | | | With- drawal | Clo- sed | | | | | | | |
| 1. Cascade Uplands ^{3/} | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330,490 | 0 |
| 2. Weiser River | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak | Cycle Park | 948 | 0 | 0 | 948 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow ^{5/} Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39,777 | 0 |
| 5. Wild Horse | Campground ^{6/} | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 6. Steck | Campground ^{6/} | 11 | 0 | 0 | 11 | 11 | 11 | 0 | 0 | 0 | 11 |
| 7. Weiser Dunes | Play Area | 200 | 0 | 0 | 200 | 0 | 200 | 0 | 200 | 0 | 0 |
| 8. Snake River | Boat Launch | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 10 | 0 |
| 9. Payette River ^{7/} Corridor | SRMA/WSR (2,600/8 mi.) | 19,000/440 | 2,600 | 2,600 | 0 | 2,600 | 2,600 | 2,600 | 0 | 19,000 | 0 |
| 10. Box Creek ^{8/} | ONA | 440 | 440 | 0 | 440 | 440 | 440 | 440 | 0 | 0 | 440 |
| 11. North Fork | Campground ^{6/} | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 0 | 10 |
| 12. Garden Valley | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 13. South Fork | Campground ^{6/} | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 3 |
| 14. Chief Parrish | Picnic Site | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 15. Boise Front ^{9/} | SRMA/ACEC | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 16. Hulls Gulch | Interpret. Trail | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 |
| 17. Treasure Valley ^{10/} | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,460 | 0 |
| 18. Little Gem | Cycle Park | 3,000 | 0 | 0 | 3,000 | 0 | 3,000 | 0 | 2,100 | 900 | 0 |
| 19. Dewey | Play Area | 30 | 0 | 0 | 30 | 0 | 30 | 0 | 30 | 0 | 0 |
| 20. Parma | Play Area | 10 | 0 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 0 |
| 21. Pickles Butte | Play Area | 500 | 0 | 0 | 500 | 0 | 500 | 0 | 500 | 0 | 0 |

^{1/} 0 = Overhead; Surf = Surface; Sub = Subsurface.^{2/} 0 = Open; L = Limited; C = Closed.^{3/} Specific constraints covered under Weiser River and Clay Peak.^{4/} Except for Electrical Transmission Towers in Existing ROW.^{5/} Specific constraints covered under Steck, Weiser Dunes and Wild Horse.^{6/} Exclude or limit livestock grazing.^{7/} Specific constraints covered under Box Creek, Garden Valley, South Fork and Chief Parrish.^{8/} Allow no harvest of timber or wood products. Protect free flow of Box Creek.^{9/} Specific constraints covered under Hulls Gulch.^{10/} Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.

Designation of Alternatives

Projects: Water and/or sanitary facilities - 7, launch ramp - 3,
access - 7

Activity Plans: RAMPs for Oxbow-Brownlee, Payette River Corridor, and
Boise Front.

Forest Resources

Objectives

Manage 20,026 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 11,869 acres of forest lands under CFL set asides. This includes 4,628 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,748 acres for the National Wild and Scenic Rivers System, 20 acres for campground withdrawal, 5,108 acres for special land exchange and 295 acres for outstanding natural area.

Provide an annual harvest of .5 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 20 mi. of forest access road (1 mile annually)
Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 50-200 acres annually.

Mineral Resources

Objectives

Make 452,677 acres (93% of area) available for locatable exploration and development and 454,389 acres (93% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Actions

| Leasables (acres) | | | Locatables (acres) | | Salables (acres) | |
|-------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 454,389 | 33,077 | 7,434 | 452,677 | 34,700 | 95 | 0 |

ALTERNATIVE D

This alternative is based on a high investment management option.

The alternative would increase the intensity of management of both commodity and noncommodity resources. Grazing opportunities, timber production and developed recreation would receive major investment. Higher investments would also be made for the improvement of wildlife habitat (terrestrial and riparian) and recreation opportunities of dispersed nature.

A major effort would be made to control the invasion of medusahead rye into native vegetative areas and to reclaim infested areas that have high productive capability.

The annual harvest of timber will be increased to 2.9 MMBF through the use of intensive management practices on all suitable commercial forest lands.

The Box Creek Wilderness Study Area would be designated and managed as an outstanding natural area.

The issues of land tenure and the Payette River as well as the other resource management programs would be the same as identified in Alternative B.

Additional recreation development would result from investment in recreation facilities for camping, boating and public access.

Areas of special interest or fragile environments would be given special designation such as Research Natural Area and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|----------------|-----------------|---------------|-----------------|
| <u>361,695</u> | acres Moderate, | <u>3,401</u> | acres Intensive |
| <u>86,643</u> | acres Limited, | <u>35,727</u> | acres Transfer |

Livestock Resources

Objectives

Manage 427,176 acres of rangeland to provide forage for livestock and wild horses.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
63,942 5 yr., 76,613 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.

West Crane Creek 12 Initial, 0 20 yr.

Wild Horses-AUMs: 20 yrs.: 4 Mile 240; West Crane Creek 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
(acres) 627 new added, 41,390 total available

Vegetative Manipulation:

5 yrs - 8,000 acres burn, spray and/or seed; 3,000 acres disc & seed
20 yrs - 31,000 acres burn, spray and/or seed; 6,000 acres disc & seed

Projects: 191 mi. fence, 40 water developments, 36 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
23 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Watershed ResourcesObjectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative ResourcesObjectives

Protect candidate and sensitive plants.

Protect and manage 11 specific sites containing candidate and sensitive plants.

Improve general condition on 21% of all fair and 3% of all good condition rangeland.

Change or improve condition on 25% of the poor condition rangeland and maintain condition on remaining areas.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Description of Alternatives

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a return potential.

Designate and/or manage 12 areas as follows:

| Sites | Special Designations | Minerals (acres) | | | | ROW Avoidance (acres) | | | ORV Use (acres) | | | |
|-----------------------------------|----------------------|------------------|-------|-------------------------|-----------|-----------------------|-----|------|-----------------|-----|-----|---|
| | | Types | Acres | Locat-ables With-drawal | Leasables | | O | Surf | Sub | O | L | C |
| | | | | | Clo-sed | No Surf. | | | | | | |
| 1. Lost Basin Grassland <u>1/</u> | RNA | 65 | 65 | 0 | 65 | 0 | 65 | 65 | 0 | 0 | 65 | |
| 2. Rebecca Sandhill <u>1/</u> | RNA | 410 | 410 | 0 | 410 | 0 | 410 | 410 | 0 | 0 | 410 | |
| 3. Sand Hollow <u>2/</u> | --- | 500 | 0 | 0 | 500 | 0 | 500 | 500 | 0 | 500 | 0 | |
| 4. Summer Creek <u>2/</u> | RNA | 200 | 200 | 0 | 200 | 0 | 200 | 200 | 0 | 0 | 200 | |
| 5. Paraphyllum Rock | RNA | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 | |
| 6. Beacon Hill | --- | 20 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 20 | 0 | |
| 7. Sagebrush Hill | --- | 10 | 0 | 0 | 10 | 0 | 10 | 10 | 0 | 0 | 10 | |
| 8. Buckwheat Flats | RNA | 60 | 60 | 0 | 60 | 0 | 60 | 60 | 0 | 0 | 60 | |
| 9. 4th July Meadow | --- | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 0 | 0 | 100 | |
| 10. Sand Capped Knob | --- | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 | |
| 11. Goodrich Creek <u>1/</u> | RNA | 440 | 440 | 0 | 440 | 0 | 440 | 440 | 0 | 0 | 440 | |
| 12. Pearl | --- | 400 | 0 | 0 | 0 | 0 | 400 | 400 | 0 | 400 | 0 | |

1/ Exclude or limit livestock grazing.

2/ No water or salt blocks in area or on ridgeline.

Projects: 6 mi. fencing

5 acres for interpretative signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.

Prepare six Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 274,810 acres of deer habitat and 3,960 acres of antelope crucial winter habitat and provide forage to support proposed populations.

Manage 183,020 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Provide special management on 61,000 acres of curlew and 22,700 acres of Columbian sharp-tailed grouse habitats to improve populations of these threatened/sensitive species.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|--------------------------|-----------------------|
| Wildlife Unit Months: | <u>6,960</u> Elk, | <u>40,272</u> Deer, | <u>1,200</u> Antelope |
| Expected Population: | <u>180</u> yrlong Elk, | <u>876</u> yrlong Deer, | <u>100</u> Antelope |
| | <u>1,200</u> winter Elk, | <u>7,440</u> winter Deer | |

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding
8,295 acres Burn, Disc & Seed
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzlers

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse.

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 11 stream miles of riparian habitat. Continue present management on 94 stream miles of riparian habitat.

Improve the condition of 10 miles of aquatic habitat and continue present management on 55 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Establish riparian pastures and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 14 mi. fencing, 8 mi. instream work
17 mi. of stream bank planting

Lands and RealtyObjectives

Identify for transfer from federal ownership 32,727 acres of public lands (243 acres through sale (T1); 25,750 acres through sale or exchange (T2); 6,174 acres through exchange (T3); and classify 560 acres for potential DLE/CA development (T4)). Retain 454,739 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Cultural ResourcesObjectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

| Sites | NR 1/ Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|----------------------------|----------------|------------------|--------|------------|-----------|----|-----|------------|-----|---|
| | | Locatables | | No Surf | Avoidance | | | (acres) 2/ | | |
| | | Withdrawal | Closed | | 0 | S | Sub | 0 | L | C |
| 1. Placerville Townsite | 8 4/ | 8 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 386 | 0 |
| 7. Centerville | 516 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 516 | 0 |
| 8. Pioneererville | 581 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 581 | 0 |
| 9. Mineral | 429 | 5/ | 0 | 5/ | 0 | 5/ | 5/ | 0 | 429 | 0 |

1/ National Register of Historic Places.

2/ 0 = Overhead; S = Surface; Sub = Subsurface.

3/ 0 = Open; L = Limited; C = Closed.

4/ National Register of Historic Places (existing).

5/ Acreage to be determined by National Register determination process.

Projects: 5 mi. fencing
Activity Plans: CRMP (9)

Recreation Resources

Objectives

Provide or enhance recreation at 21 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

ORV recreation activity is open on 3,276 acres, limited (to existing or designated roads and trails) on 481,800 acres and closed on 2,390 acres.

Manage 35,727 acres of public lands recommended for transfer as limited to designated or existing roads and trails for ORV recreation until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic River System as a recreation river.

Description of Alternatives

Designate and manage 21 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|---|--------------------------|------------------------------|------------------|-----------------|-------------|-----------------------------|------------------|-------|----------------|---------|-----|
| | | | Locat- ables | Lease- ables | | | | | | | |
| | | | With- drawal | Clo- sed | No Surf. | 0 | Surf | Sub. | 0 | L | C |
| 1. Cascade Uplands ^{3/} | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330,490 | 0 |
| 2. Weiser River | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak | Cycle Park | 948 | 0 | 0 | 948 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow ^{5/} Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | ^{4/} 0 | 0 | 0 | 39,777 | 0 |
| 5. Wild Horse | Campground ^{6/} | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 6. Steck | Campground ^{6/} | 11 | 0 | 0 | 11 | 11 | 11 | 0 | 0 | 0 | 11 |
| 7. Weiser Dunes | Play Area | 200 | 0 | 0 | 200 | 0 | 200 | 0 | 200 | 0 | 0 |
| 8. Snake River | Boat Launch | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 10 | 0 |
| 9. Payette River ^{7/} Corridor | SRMA/WSR | 19,000/ (2,600/ 8 mi.) | 2,600 | 2,600 | 0 | 2,600 | 2,600 | 2,600 | 0 | 19,000 | 0 |
| 10. Box Creek ^{8/} | ONA | 440 | 440 | 0 | 440 | 440 | 440 | 440 | 0 | 0 | 440 |
| 11. North Fork | Campground ^{6/} | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 0 | 10 |
| 12. Garden Valley | Boat Launch | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 13. South Fork | Campground ^{6/} | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 3 |
| 14. Chief Parrish | Picnic Site | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 15. Boise Front ^{9/} | SRMA/ACEC | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 16. Hulls Gulch | Interpret. Trail | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 |
| 17. Treasure Valley ^{10/} | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,460 | 0 |
| 18. Little Gem | Cycle Park | 3,000 | 0 | 0 | 3,000 | 0 | 3,000 | 0 | 2,100 | 900 | 0 |
| 19. Dewey | Play Area | 30 | 0 | 0 | 30 | 0 | ^{4/} 30 | 0 | 30 | 0 | 0 |
| 20. Parma | Play Area | 10 | 0 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 0 |
| 21. Pickles Butte | Play Area | 500 | 0 | 0 | 500 | 0 | 500 | 0 | 500 | 0 | 0 |

^{1/} 0 = Overhead; Surf = Surface; Sub = Subsurface.^{2/} 0 = Open; L = Limited; C = Closed.^{3/} Specific constraints covered under Weiser River and Clay Peak.^{4/} Except for Electrical Transmission Towers in Existing ROW.^{5/} Specific constraints covered under Steck, Weiser Dunes, Wild Horse and Snake River.^{6/} Exclude or limit livestock grazing.^{7/} Specific constraints covered under Box Creek, Garden Valley, South Fork and Chief Parrish.^{8/} Allow no harvest of timber or wood products. Protect free flow of Box Creek.^{9/} Specific constraints covered under Hulls Gulch.^{10/} Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.

Projects: Water and/or Sanitary facilities 7, Launch Ramp 3,
Access 7

Activity Plans: RAMPs for Oxbow-Brownlee, Box Creek, Payette River
Corridor, and Boise Front.

Forest Resources

Objectives

Manage 25,347 acres of suitable commercial forest land for timber management and harvest.

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 6,548 acres of forest lands under CFL set asides. This includes 4,923 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal, 1,240 acres for the National Wild and Scenic Rivers System, 20 acres for campground withdrawal, and 295 acres for outstanding natural area.

Provide an annual harvest of 2.9 MMBF through the use of full intensive management practices on all suitable commercial forest land.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 116 mi. of forest access road (5.8 miles annually)
Acquire access on one to three areas.

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest lands will be through selective and clearcutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 200-1,200 acres annually.

Mineral Resources

Objectives

Make available 454,666 acres (93% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Description of Alternatives

Actions

| Leasables (acres) | | | Locatables (acres) | | Salables (acres) | |
|-------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 456,289 | 31,177 | 6,934 | 454,666 | 32,800 | 95 | 0 |

ALTERNATIVE E

(PREFERRED ALTERNATIVE)

The objective of this alternative is to provide an optimum mixture of protection and enhancement of the natural environment with commodity resource utilization (renewable and nonrenewable). Preservation of significant natural resource features is provided for along with moderate increases in commodity resource use. This is the preferred alternative.

A portion of the Payette River would be recommended for study for possible addition to the National Wild and Scenic River System.

Areas of special interest or fragile environments would be given special designation such as Research Natural Areas and ACEC.

The 487,466 acres of public lands would be placed into one of four multiple use or transfer categories as follows:

| | | | |
|----------------|-----------------|---------------|-----------------|
| <u>347,956</u> | acres Moderate, | <u>3,399</u> | acres Intensive |
| <u>118,587</u> | acres Limited, | <u>17,524</u> | acres Transfer |

Livestock ResourcesObjectives

Manage 449,059 acres of rangeland to provide forage for livestock and wild horses.

Livestock-AUMs: 72,571 Active Pref., 66,424 Licensed
66,257 Initial, 68,000 5 yr., 70,536 20 yr.

Wild Horses-Numbers: 4 Mile 10 Initial, 20 20 yr.
 West Crane Creek 12 Initial, 0 20 yr.

Wild Horses-AUMs: 20 yrs.: 4 Mile 240; West Crane 0

Actions

Stock Driveways: 40,763 existing maintained, 22,237 existing eliminated
 (acres) 627 new added, 41,390 total available

Vegetative Manipulation:

5 yrs - 5,000 acres burn, spray and/or seed; 2,000 acres disc'd & seed
 20 yrs - 18,279 acres burn, spray and/or seed; 6,000 acres disc'd & seed

Projects: 60 mi. fence, 66 water developments, 15 mi. pipelines

Activity Plans: 7 existing AMPs/CRMPs to be reviewed and updated.
12 AMPs will be prepared.

Livestock grazing will continue and may be adjusted on currently grazed public lands classified for transfer until these lands are transferred.

Description of Alternatives

Special Considerations

Seed mixtures on vegetative manipulations will include grass, forb and shrub species that will benefit both livestock and wildlife.

Note: For analysis purposes for livestock use levels (AUMs), it was assumed that only the current land transfer applications being processed would be completed within the next 5 years and that no other land transfers would occur within the next 5 years. Consequently the 5-year forage level for livestock in the preferred alternative is not comparable with the 5-year forage level for livestock in Alternatives A, B, C, and D since it was assumed that all land transfers in those alternatives would be completed at the end of 5 years. See Appendix G for further information.

Watershed Resources

Objectives

Provide special designation and management for the Boise Front area (12,000 acres).

Actions

Designate 12,000 acres of the Boise Front as an ACEC and prepare/update the following activity plans - HMP, RAMP.

Vegetative Resources

Objectives

Protect candidate or sensitive plants.

Protect and manage 12 specific sites containing candidate and sensitive plants.

Improve general condition on 32% of all fair and 11% of all good condition rangeland.

Change or improve condition on 31% of the poor condition rangeland and maintain condition on remaining.

Actions

Develop and implement management actions for areas found containing candidate or sensitive plants. Fence selected areas where harmful disturbance is likely. Monitor suspected areas.

Exclude surface and subsurface ROWs in those areas known to contain candidate or sensitive plants. Include no surface occupancy stipulations in all mineral leases.

Adjust livestock grazing practices and reduce livestock preferences in allotments in poor and fair condition.

Mechanically treat (through range and wildlife projects) areas of poor and fair condition rangeland that possess a high return potential.

Designate and/or manage 12 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW Avoidance (acres) 1/ | | | ORV Use (acres) 2/ | | |
|----------------------------|----------------------|-------|------------------|-------------|--------|--------------------------|------|-----|--------------------|-----|-----|
| | | | Locatable | Leasables | | 1/ | Surf | Sub | 0 | L | C |
| | | | | With-Drawal | Closed | | | | | | |
| 1. Lost Basin Grassland 3/ | RNA | 65 | 0 | 0 | 65 | 0 | 65 | 65 | 0 | 0 | 65 |
| 2. Rebecca Sandhill 3/ | RNA | 410 | 0 | 0 | 410 | 0 | 410 | 410 | 0 | 0 | 410 |
| 3. Sand Hollow 4/ | --- | 500 | 0 | 0 | 500 | 0 | 500 | 500 | 0 | 500 | 0 |
| 4. Summer Creek 4/ | RNA | 200 | 0 | 0 | 200 | 0 | 200 | 200 | 0 | 0 | 200 |
| 5. Paraphyllum Rock | RNA | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 6. Beacon Hill | --- | 20 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 20 | 0 |
| 7. Sagebrush Hill | --- | 10 | 0 | 0 | 10 | 0 | 10 | 10 | 0 | 0 | 10 |
| 8. Buckwheat Flats | RNA | 60 | 0 | 0 | 60 | 0 | 60 | 60 | 0 | 0 | 60 |
| 9. 4th July Meadow | --- | 100 | 0 | 0 | 100 | 0 | 100 | 100 | 0 | 0 | 100 |
| 10. Sand Capped Knob | --- | 40 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 40 |
| 11. Goodrich Creek 3/ | RNA | 440 | 0 | 0 | 440 | 0 | 440 | 440 | 0 | 0 | 440 |
| 12. Pearl | --- | 400 | 0 | 0 | 400 | 0 | 400 | 400 | 0 | 400 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.

2/ 0 = Open; L = Limited; C = Closed.

3/ Exclude or limit livestock grazing.

4/ No water or salt blocks in area or on ridgeline.

Projects: mi. trail rerouting

 6 mi. fencing

 5 acres for interpretive signing

Activity Plans: Incorporate management needs for candidate and sensitive plant species in all activity plans where plants are known.

Prepare six Research Natural Area Management Plans.

Wildlife Resources

Objectives

Manage 181,640 acres of elk habitat, 275,250 acres of deer habitat and 4,400 acres of antelope crucial winter habitat and provide forage to support proposed populations of these animals.

Manage 185,860 acres of sage grouse habitat to improve brooding and nesting habitat.

Improve 23,912 acres of wildlife habitat through new seeding and interseeding existing areas and shrub plantings.

Description of Alternatives

Provide special management on 61,000 acres of curlew and 22,700 acres of Columbian sharp-tailed grouse habitats to improve populations of these threatened/sensitive species.

Maintain existing habitats for other wildlife species.

| | | | |
|-----------------------|--------------------------|---------------------------|-----------------------|
| Wildlife Unit Months: | <u>7,124</u> Elk, | <u>44,612</u> Deer, | <u>1,800</u> Antelope |
| Expected Population: | <u>191</u> yrlong Elk, | <u>961</u> yrlong Deer, | <u>175</u> yrlong |
| | <u>1,208</u> winter Elk, | <u>8,270</u> winter Deer, | Antelope |

Actions

Vegetative Manipulation: 10,387 acres Shrub, Grass & Forb Seeding,
8,295 acres Burn, Disc & Seed,
2,230 acres Interseed,
3,000 acres Special Project Seeding

Projects: 30 mi. fence, 2 Guzzler

Activity Plans: HMP for Curlew, Columbian Sharp-tailed Grouse; and deer (Boise Front).

Designate 61,000 acres of curlew habitat and 4,200 acres of sharp-tailed grouse habitat as ACECs.

Special Considerations (rehabilitation, seed mixture, seasonal restrictions, ORV restrictions)

Riparian and Aquatic Resources

Objectives

Improve the condition of 16 stream miles of riparian habitat. Continue present management on 102 stream miles of riparian habitat.

Improve the condition of 14 miles of aquatic habitat and continue present management on 66 miles of aquatic habitat.

Actions

Adjust livestock grazing practices on riparian areas in allotments where riparian/aquatic projects are proposed.

Establish riparian pastures, grazing systems, and/or adopt special measures to improve riparian and aquatic areas in all AMPs containing these areas.

Projects: 11 mi. fencing, 11 mi. instream work
7 mi. of stream bank planting

Lands and Realty

Objectives

Identify for transfer from federal ownership 17,524 acres of public lands (563 acres through sale (T1) and 10,107 acres through sale or exchange (T2) and 6,374 acres through exchange (T3), and 480 acres through DLE (T4)). Retain 469,942 acres of public lands in federal ownership.

Actions

Initiate clearance actions (cultural, wildlife, paleontologic, etc.) on lands to be transferred. Provide 2-year notifications to livestock permittees once the final decision to transfer has been made.

Recreation Resources

Objectives

Provide or enhance recreation at 19 areas.

Provide for ORV recreation activity on public lands.

Manage 2,600 acres of public lands along the Payette River as a Wild and Scenic River (recreation river category).

Actions

ORV recreation activity is open on 257,623 acres, limited (to existing or designated roads and trails) on 227,895 acres and closed on 1,948 acres.

Manage 11,084 acres of public lands recommended for transfer as limited to designated or existing roads and trails and 6,160 acres as open for ORV recreation, until lands are transferred.

Recommend the study of 8 miles of Payette River (South Fork) for possible inclusion into the National Wild and Scenic Rivers System as a recreation river.

Description of Alternatives

Designate and manage 19 areas as follows:

| Sites | Special Designations | Acres | Minerals (acres) | | | ROW 1/ Avoidance (acres) | | | ORV (acres) 2/ | | |
|-------------------------------------|----------------------|-----------------------------|------------------|-----------------|-----|-----------------------------|--------------------|------|----------------|--------|-----|
| | | | Locat- ables | Lease- ables | No | With- drawal | Clo- sed | Sub. | 0 | L | C |
| | | | | | | | | | | | |
| 1. Cascade Uplands <u>3/</u> | ERMA | 334,000 | 0 | 0 | 0 | 0 | 0 | 0 | 254,743 | 74,799 | 0 |
| 2. Weiser River Launch | Boat | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 3. Clay Peak Cycle Park | | 948 | 0 | 0 | 948 | 0 | 948 | 948 | 436 | 0 | 512 |
| 4. Oxbow <u>4/</u> Brownlee | SRMA | 40,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39,779 | 0 |
| 5. Steck <u>5/</u> | Campground | 11 | 0 | 0 | 11 | 11 | 11 | 0 | 0 | 0 | 11 |
| 6. Weiser Dunes | Play Area | 200 | 0 | 0 | 0 | 0 | 200 | 0 | 200 | 0 | 0 |
| 7. Snake River Launch | Boat | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 10 | 0 |
| 8. Payette River <u>6/</u> Corridor | SRMA/WSR | 19,000/ (2,600/ 8 mi) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,984 | 0 |
| 9. North Fork <u>5/</u> | Campground | 10 | 0 | 0 | 10 | 10 | 10 | 0 | 0 | 0 | 10 |
| 10. Garden Valley Launch | Boat | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 11. South Fork <u>5/</u> | Campground | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 0 | 0 | 3 |
| 12. Chief Parrish Site | Picnic | 2 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 2 |
| 13. Boise Front <u>7/</u> | SRMA/ACEC | 12,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11,995 | 0 |
| 14. Hulls Gulch Trail | Interpret. | 5 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 5 |
| 15. Treasure Valley <u>8/</u> | ERMA | 72,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68,780 | 0 |
| 16. Little Gem | Cycle Park | 3,000 | 0 | 0 | 0 | 0 | 3,000 <u>9/</u> | 0 | 2,100 | 900 | 0 |
| 17. Dewey | Play Area | 30 | 0 | 0 | 0 | 0 | 30 | 0 | 30 | 0 | 0 |
| 18. Parma | Play Area | 10 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 |
| 19. Pickles Butte | Play Area | 180 | 0 | 0 | 0 | 0 | 180 | 0 | 180 | 0 | 0 |

1/ 0 = Overhead; Surf = Surface; Sub = Subsurface.2/ 0 = Open; L = Limited; C = Closed.3/ Specific constraints covered under Weiser River and Clay Peak.4/ Specific constraints covered under Steck, Weiser Dunes and Snake River.5/ Exclude or limit livestock grazing.6/ Specific constraints covered under North Fork, Garden Valley, South Fork and Chief Parrish.7/ Specific constraints covered under Hulls Gulch.8/ Specific constraints covered under Little Gem, Pickles Butte, Dewey and Parma.9/ Except for electrical transmission towers in existing right-of-way.

Projects: Water and/or sanitary facilities - 7, launch ramp - 3, access - 7

Activity Plans: RAMPS for Oxbow-Brownlee, Payette River Corridor, and Boise Front.

Cultural Resources

Objectives

Protect, through special designation and management, areas with significant cultural values.

Actions

Nominate eight sites to the National Register of Historic Places and manage as shown below.

Surface and subsurface ROWs will be routed to avoid cultural sites.

| Sites | NR 1/ Acres | Minerals (acres) | | | ROW | | | ORV Use | | |
|-----------------|----------------|------------------|-----------|------|-----------|----|-----|------------|-----|---|
| | | Locatables | Leasables | | Avoidance | | | (acres) 5/ | | |
| | | | No | | | | | | | |
| | | Withdrawal | Closed | Surf | O | S | Sub | O | L | C |
| 1. Placerville | | | | | | | | | | |
| Townsite 4/ | 8 | 8 | 0 | 8 | 0 | 8 | 8 | 0 | 8 | 0 |
| 2. Grays Creek | 40 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 40 | 0 |
| 3. Indian Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 4. Milk Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 5. Cabin Creek | 20 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 20 | 0 |
| 6. Quartzburg | 386 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 386 | 0 |
| 7. Centerville | 516 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 516 | 0 |
| 8. Pioneerville | 581 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 581 | 0 |
| 9. Mineral | 429 | 2/ | 0 | 2/ | 0 | 2/ | 2/ | 0 | 429 | 0 |

1/ National Register of Historic Places.

2/ Acreage to be determined by National Register nomination process.

3/ O = Open, L = Limited, C = Closed.

4/ National Register of Historic Places (existing).

5/ O = Overhead; S = Surface; Sub = Subsurface.

Projects: 5 mi. fencing

Activity Plans: CRMP (9)

Forest Resources

Objectives

Manage 26,663 acres of suitable commercial forest land for timber management and harvest.

Description of Alternatives

Allow firewood harvesting (commercial and noncommercial) on forest lands.

Manage 5,232 acres of forest lands under CFL set asides. This includes 5,139 acres for TPCC withdrawal, 70 acres for seed orchard withdrawal and 23 acres for campground withdrawal.

Provide an annual harvest of 1.0 MMBF.

Obtain access to suitable commercial forest lands through acquisition when necessary for program management.

Actions

Projects: Build 40 mi. of forest access road (2 miles annually)

Acquire access on one to two areas

Activity Plans: Timber Management Plans

Special Considerations

Harvesting of suitable commercial forest land will generally be through selective cutting practices. Any clearcutting will be limited to a size of 40 acres or less. Timber harvest would occur on approximately 100-400 acres annually.

Mineral Resources

Objectives

Make 456,281 acres (94% of area) available for locatable exploration and development and 456,289 acres (94% of area) for leasable mineral exploration and development.

Continue making available salable minerals from three material sale sites and 16 free-use sites as needed.

Actions

| Leasables (acres) | | | Locatables (acres) | | Salables (acres) | |
|-------------------|--------|-----------------|--------------------|-----------|------------------|-------------|
| Open | Closed | No Surface Occ. | Open | Withdrawn | Available | Unavailable |
| 456,289 | 31,177 | 2,335 | 456,281 | 31,185 | 95 | 0 |

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

This plan recommends ACEC designation for three areas which met the criteria (of relevance and importance) to be considered for ACEC designations (Boise Front Area; Columbian Sharp-tail Grouse Habitat Area; and the Black Canyon Long-billed Curlew Management Area). The ACECs are shown on Map 2-3. The following summarizes the description and special requirements for the three ACECs recommended in the RMP. Additional information is available at the Boise District Office, BLM.

Name: Boise Front Area of Critical Environmental Concern

Purpose

The purpose for designating 12,000 acres of the Boise Front as an ACEC is to focus attention and identify management direction on this important natural resource. Management objectives are to protect and enhance the watershed resource, quality of wildlife habitat, variety of recreation opportunities, and scenic values.

Site Description

The Boise Front ACEC would encompass 12,000 acres in the hills and mountains lying immediately north and east of Boise, Idaho. The 12,000 acres are situated in a land ownership pattern with adjacent Forest Service, Idaho Fish and Game, State Department of Public Lands, and private lands. Elevations range from 3,200 feet at Lucky Peak reservoir to 5,680 feet near Lucky Peak. Topography is generally steep. A major portion of the land area contains slopes of 20 to 60 percent.

Soils in the area are formed in deeply weathered granite of the Idaho Batholith and are highly erosive and easily disturbed when dry or saturated.

Present vegetation includes cheatgrass and other annuals at the lower elevations, sagebrush and bitterbrush at mid elevations, and scattered stands of Douglas-fir and ponderosa pine at higher elevations. Five major drainages usually provide streamflows throughout the year. Other stream courses are generally dry during the summer months with spring snowmelt and rainstorms contributing to seasonal streamflows. The major drainages and many smaller ones support riparian vegetation. Livestock use includes approximately 325 cattle in a rest/rotation grazing system managed by the Idaho Department of Fish and Game. Several bands of sheep trail across the area in spring and fall.

In 1959 after a fire eliminated much of the vegetative cover, two separate storms caused serious flooding and sediment damage to the northeast portion of the City of Boise. Following a costly cleanup, extensive watershed rehabilitation work was done by several agencies in a joint effort to stabilize the vulnerable resource. The terraces constructed as part of that effort are still visible from the City of Boise and vicinity as a reminder of the areas sensitivity to disturbance and forces of nature.

Resource Values

The Boise Front functions as an important groundwater recharge area. Snow melt and rain waters enter the soil and percolate down through the granitic soils, faults and fractures and eventually create groundwater reservoirs. These subsurface reservoirs release water at numerous springs and support the perennial streams and riparian vegetation. Much of the subsurface flows accumulate in groundwater reservoirs which are available for Boise Valley users. The City of Boise is a major user of this groundwater and operates several groundwater wells for municipal use including geothermal heating.

The Boise Front is a crucial winter range for approximately 4,000 mule deer. The Highland Valley and Shaw Mountain roads are currently closed to vehicles from December 15 to April 1 to protect this herd. Upland game birds (quail, dove, chukar and Hungarian partridge), numerous small mammals, reptiles and non game birds are also found in the area. Two candidate (Federal Category II) plants, Aaseae's onion (Allium aseae) and Mulford milkvetch (Astragalus mulfordeae) have been identified in the area.

Recreation use on the Boise Front includes ORV activities, hunting, hiking, horseback riding, and interpretive uses along the Halls Gulch National Recreation Trail.

The Boise Front is a scenic backdrop for the City of Boise and surrounding area. Although there are several powerlines traversing the area, they are generally not noticeable from a distance. More noticeable are the roads and trails, many of which have been established through unrestricted ORV use. It is currently managed as a Class II visual resource.

Cause for Concern

The combination of steep slopes and highly erodible granitic soils make the area extremely sensitive to changes in the vegetative community through surface disturbing activities. Disturbance of the vegetative community can lead to rill and gully erosion which are now evident on the Boise Front. Much of the serious rill and gully erosion has been attributed to disturbance caused by off road vehicle use. This erosion can reduce the function and value of the area as a watershed and groundwater recharge area. Springs and riparian vegetation may also be reduced. The current erosion problems are increasing and the ability of the area to fully function in its capacity as a watershed is threatened.

Surface disturbing activities which can lead to undesirable vegetative changes and erosion include unrestricted motorized and nonmotorized vehicle use, road construction and maintenance, mineral excavation, certain rights-of-way, fire occurrence, and suppression activities.

The scars from severe erosion can also reduce the attractiveness of the area as a scenic backdrop for viewers from the Boise vicinity and can reduce the quality of recreation activities.

Vehicle use and human disturbance during the winter months can reduce the effectiveness of winter habitat for deer populations by adding stress during a critical time.

Management Guidelines

Resource Use Limitations

The following resource use limitations will apply to the Boise Front ACEC to protect resource values:

1. Motorized and nonmotorized vehicle use will be limited to designated roads and trails.
2. The Highland Valley and Shaw Mountain roads will be closed to motorized and nonmotorized vehicle use from December 15 to April 1.
3. The upper portion of the 8th Street Road will be closed to 4-wheeled vehicles during the wet winter months.
4. The area will be closed to disposal of mineral materials under the Materials Act of 1947, as amended (Alternative B only).
5. The area will be managed to conform to Class II Visual Resource Management Guidelines.
6. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

The following activities will receive management emphasis to further protect resource values:

1. Closure and rehabilitation of certain roads and trails.
2. Maintenance and reconstruction of existing roads and trails.
3. Restriction of future rights-of-way to insure minimal erosion and visual intrusion.
4. Full fire suppression.
5. Rehabilitation of burned areas.
6. Installation of water control structures to reduce erosion where needed.

Name: Columbian Sharp-tailed Grouse Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating 4,200 acres as an ACEC is to intensify habitat management for one of the last remaining populations of Columbian

sharp-tailed grouse in western Idaho and eastern Oregon. The basic management objectives will be to improve, protect and enhance the quality of the habitat for this sensitive species.

Site Description

This ACEC would be located approximately 16 miles north of Weiser, Idaho on the south side of Hitt Mountain with USFS land, State land and private lands on the north, east and south.

It is bordered on the west by Mann Creek while Sage Creek and Deer Creek transect the area.

Topography is mostly rolling hills with some steep slopes adjacent to Mann and Sage Creeks. Elevation varies from 3,200 feet to 4,000 feet. Soils are mixed and it is not uncommon to find pockets of loamy soil interspersed in shallow rocky soils.

The area presents a mosaic of vegetation types corresponding to the various soils. Vegetation associations include big sagebrush/grasses and mountain shrub patches with aspen, serviceberry, chokecherry, bittercherry and snowbrush shrubs, riparian zones with willow, rose and hawthorne shrubs with the northern areas of ponderosa pine with some Douglas-fir.

Resource Values

In addition to Columbian sharp-tailed grouse (Pediocetes phasianellus columbianus), the area contains important spring, fall and summer habitat for mule deer which are common in the area. Concentrations of migrating mule deer use the area during the spring and fall. It is also important spring and fall elk range. The area has a rich diversity of wildlife. It supports a variety of mammals from coyotes to deer mice. Approximately 180 different species of birds have been observed on the area.

Causes for Concern

Columbian sharp-tailed grouse were once abundant and widespread throughout the northwest. This species has disappeared from most of its former range and is now extinct in California, Oregon and Nevada and reduced to remnant populations over the remainder of its range.

Currently, remaining populations in Idaho are small and disjunct. In western Idaho, populations are extremely rare and are limited to Washington and Adams Counties. The largest known population in western Idaho is found in the vicinity of this ACEC. There are four known dancing grounds in the area and the fluctuating population numbers approximately 200 birds.

The Columbian sharp-tailed grouse has been designated as a "Species of Special Concern" by the Idaho Department of Fish and Game (IDFG) and as a "Sensitive Species" by the U.S. Fish and Wildlife Service and Bureau of Land Management (BLM). BLM policy is to maintain or increase current population levels of sensitive species through habitat protection and enhancement.

Management Guidelines

Resource Use Limitations

1. Motorized vehicle use will be limited to designated roads and trails.
2. Livestock grazing will be adjusted to allow the range to reach and maintain optimal habitat condition.
3. Surface occupancy for all oil and gas, and geothermal leases will be determined on a site specific basis.
4. Seasonal occupancy stipulations will be applied on all oil and gas and geothermal leases.
5. Rights-of-ways construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.
6. No permanent new roads will be allowed in the area.
7. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Develop a fully comprehensive habitat management plan for the area.
2. Fire rehabilitation and vegetative manipulation will be conducted with native species emphasized.
3. Maintenance of the bordering fences to manage livestock movement will be conducted annually.
4. Pursue acquisition of key habitat areas on State and private lands.
5. Place high fire suppression priority on the area.

Name: Long-Billed Curlew Habitat Area of Critical Environmental Concern

Purpose

The purpose for designating approximately 61,000 acres as an ACEC is to identify the area as crucial nesting habitat for Long-Billed Curlew (*Numenius americanus*), a federally protected migratory species. The main management objective will be to maintain nesting habitat for the 1,000 curlew pairs that nest and raise their young in the area.

Site Description

The area is a low, rolling upland lying between the Boise, Payette and Snake River valleys. The area is characterized by choppy rolling topography which supports a semi-desert type vegetative community. Average rainfall is approximately 11 inches per year with most of the moisture falling from November to June.

The native habitat has been highly modified over the years. Historically, the area was a sagebrush/bunchgrass vegetation community. Livestock grazing, frequent wildfire and the invasion of exotic annual grasses have largely eliminated the shrubs and perennial grasses.

In general, there are four cover types: 1) annual rangeland, 2) sagebrush, 3) crested wheatgrass, and 4) irrigated agriculture. The annual rangeland type is the key habitat for nesting curlews.

Resource Values

There are eight livestock operators that utilize the rangelands in the area. They graze both cattle and sheep on approximately 80,000 acres of state, private, and public lands. Grazing periods occur throughout the year with some operators grazing at various seasons of the year.

Recreation use on the area is divided into four areas. The area east of Little Freezeout is used heavily by horse enthusiasts. In the past, some endurance rides have been held in this area. The area is also used by upland bird hunters in the fall. Limited ORV use also takes place. The area from Little Freezeout west to Sand Hollow is used by ORV enthusiasts. The Dewey ORV Park is located in this area. There is also some use by equestrians and upland bird hunters in the fall. The area west of Sand Hollow is heavily used by upland game hunters. There has also been some dog trials held in this area. Equestrians use the area while ORV use is heavy in the southwest corner of the area and a motorcross track is located in the northwest corner of the area. The areas north of the Black Canyon and west of the Sand Hollow freeway exits have dense populations of ground squirrels and are used by squirrel hunters in the spring.

Cause for Concern

Each year, Long-billed Curlew migrate into the area arriving about the third week in March. This large shore bird nests and raises its young in the annual grass habitat. The area supports about 1,000-nesting pairs, the largest nesting population in the western United States. Research on the population and habitat relationships was conducted in this area from 1977 to 1979. This research provided the base line information to manage this significant population.

A substantial decline in population and distribution of this species in the United States prompted its classification as a "Sensitive Species," by both the BLM and U.S. Fish and Wildlife Service. The Idaho Department of Fish and Game has designated this bird as a "Species of Special Concern." These classifications are an "early warning" that a species may be in trouble and if declines continue that official listing with maximum protection under the Endangered Species Act may be necessary. A habitat management plan was developed to assist in the conservation of crucial curlew habitat.

Management Guidelines

Resource Use Limitations

1. Motor vehicle use will be limited to designated roads and trails.
2. Seasonal occupancy stipulations will apply on all oil and gas and geothermal leases.
3. Rights-of-way construction activities for transmission lines, pipelines and other major projects will not be allowed during the nesting and brood-rearing periods.
4. Road construction will be limited and evaluated on a site specific basis.
5. All lands within the ACEC will be retained in Federal ownership.

Management Emphasis

1. Maintain sufficient good curlew habitat to support 1,000 nesting pairs during the breeding season.
2. Pursue the acquisition of key habitat on state and private lands through land exchange.
3. Enforce the ORV use limitations during the curlew nesting and brood-rearing periods.
4. Encourage intensive grazing systems that would improve curlew habitat in areas where vegetation is too high and too dense.
5. Use controlled burns as a management tool to maintain and improve curlew habitat.
6. Give curlew habitat priority consideration in all range improvement projects.
7. Encourage domestic sheep use on the area.

ALTERNATIVES CONSIDERED BUT NOT DEVELOPED

Four additional alternatives were considered by the RMP interdisciplinary team but were not developed or analyzed in the plan because they did not meet the criteria for selection. Alternatives not developed are as follows:

Maximum Livestock Grazing

This alternative would have developed livestock grazing to the maximum extent possible without consideration for other resource needs and/or demands. It included rehabilitating all lands infested with medusahead rye.

This alternative was not developed further because:

Description of Alternatives

1. Past, current and expected funding suggested that this alternative would not be economically feasible. It would require a high investment level to treat all lands invaded by medusahead rye (greater than \$50.00 per acre on the best sites to \$100.00 on poorer sites). A benefit/cost analysis using the current grazing fee charges would not prove beneficial.
2. It would not meet the provisions of existing laws and regulations for providing for multiple use of the public lands. This alternative would have catastrophic impact on crucial wildlife habitat as available AUMs would be given to livestock.
3. Existing social acceptance of providing for wildlife habitat on public lands for nature study, hunting and overall enjoyment by the areas population and the people of the State of Idaho would make the alternative unacceptable. Public comments received during the early stages of the planning process favored giving wildlife consideration in our plans.

This alternative would not meet the public's interest.

Maximum Wildlife Production

This alternative would have emphasized converting land capabilities to wildlife habitat to the maximum extent possible without consideration for other resource needs and/or demands.

This alternative was not further developed because:

1. All the currently developed alternatives would meet the reasonable numbers for wildlife populations desired by the Idaho Department of Fish and Game.
2. The development of maximum wildlife habitat on public lands would create major increases in wildlife numbers that would have significant impacts (adverse) on adjacent private lands because the private land contains a major amount of winter habitat (50%+) that would have to support the wintering wildlife. This would be in direct conflict with private landowners management of private wintering livestock ranges.

Public comments received during early stages of the planning process identified that population explosions were a problem particularly in wintering areas. A maximum wildlife production alternative is counter to solving this concern and would not solve the issue. An alternative designed to increase wildlife populations and provide winter wildlife habitat needs will be developed.

Maximum Environmental Protection

This alternative would have limited any outside influence to the natural ecosystem of the area and would have prohibited the conversion of any lands to uses that would deplete resources or result in surface disturbing activities.

It was not developed because:

1. Much of the vegetative resources have been disturbed and invaded by exotic vegetative species which do not contribute to the natural habitat of endemic species. The treatment of entire areas invaded by exotic species (medusahead rye) is currently not feasible in light of existing and expected funding levels over the duration of this planning and management cycle.
2. Much of the land pattern is fragmented and affected by management activities (generally non natural) occurring on adjacent private lands.
3. Based upon current and expected funding levels and past program funding levels this alternative would be unfeasible to implement. Excessive costs would be required beyond a reasonable level to provide boundary fencing and no benefiting program would have the funds for such costs.

Public input received during early stages of planning process centered upon recognition of all uses at moderate management levels. As a result of this public input, the above would not be an acceptable alternative.

No Livestock Grazing

This alternative would have removed the grazing of livestock from the public lands in the resource area. This alternative was eliminated from consideration early in the planning process. It was determined that it is both unreasonable and not feasible in light of local social, economic and environmental conditions. The rationale for not considering this alternative is:

1. The resource area is made up of both blocked and fragmented public lands. About 336 of the allotments exist on this land base (487,500 acres). Extensive fencing of the public land boundary would be required to keep livestock off of the public lands from adjacent private lands and U.S. Forest Service allotments. This fencing cost would be prohibitive and unreasonable and the enforcement of no grazing would be unrealistic as well as unmanageable. This fencing would also have an adverse impact on movement of wildlife particularly if fences had to be built to meet sheep specifications.
2. Livestock grazing is an important industry in the eight county area that the resource area lies within. It contributes \$43 million and 1,553 jobs to the regional economy of west-central Idaho. Given this economic significance and the general social acceptance of livestock grazing by the people in this area and the State of Idaho, there would be no realistic support for this alternative.
3. Although a no grazing alternative would, in part, satisfy a portion of the range management issue, it would not have resulted in major rangeland improvements. This is due to the magnitude of poor condition rangeland resulting from invasion of medusahead rye grass and not as a result of livestock on the rangeland.

4. Livestock grazing has long been recognized as a legitimate use of the public lands. The removal of this use from a multiple use resource area, where forage in fair or better condition exists, cannot be justified.
5. Public input received during public meetings, supported management actions that recognized all uses on public lands. No - "No Grazing" type management actions were proposed.

RELATIONSHIP TO NEPA GOALS

The alternatives described in this RMP/EIS all would achieve the requirements of sections 101 and 1023(1) of NEPA and other environmental laws and policies. Each of the alternatives is designed to use practicable means to create and maintain conditions under which humans and nature can exist in productive harmony, but the emphasis is different in each alternative. Alternative A would place little emphasis on preservation of natural aspects of our national heritage and enhancement of the quality of renewable resources. Alternatives A, B, C, D and E would limit the range of uses and the environment. Alternative E, the Preferred Alternative, would attain the widest range of beneficial uses of the environment while preserving important historic, cultural, and natural aspects of our national heritage.

All actions taken to implement the Preferred Alternative (Alternative E) would be monitored as outlined in Appendix P.

COMPARATIVE SUMMARY

A comparison between alternatives is shown on the following page.

COMPARATIVE SUMMARY

| Resource | Alternative A | Alternative B | Alternative C | Alternative D | Alternative E |
|--|--|---|--|---|--|
| SOILS - Erosion Rate | Up to 10% increase. | 5% increase. | 20% decrease. | 10% increase. | 2% increase. |
| WATER QUALITY | Slight improvement. | Slight decline. | Moderate improvement. | Slight decline. | Slight improvement. |
| VEGETATION - Rangeland Condition | Decline on 3 to 5% of the area. | Improvement on 18 to 23% of the area. | Improvement on 20 to 25% of the area. | Improvement on 14 to 19% of the area. | Improvement on 22 to 27% of the area. |
| CANDIDATE AND SENSITIVE PLANTS | 2 Research Natural Areas - 475 acres. Slight protection. | 6 Research Natural Areas - 1,215 acres. Moderate protection. | 6 Research Natural Areas - 1,215 acres. Full protection. | 6 Research Natural Areas - 1,215 acres. Full protection. | 6 Research Natural Areas - 1,215 acres. Moderate protection. |
| RIPARIAN HABITAT - Miles changed - primary cause | 106 - maintain 11 - improve-AUM/projects 5 - decrease-AUM 71 - improve-AMP | 101-maintain 9 - improve-AUM/projects 12 - decrease-AUM 176 - improve-AMP | 107 - maintain 12 - improve-AUM/projects 3 - decrease-AUM 140 - improve-AMP | 94 - maintain 11 - improve-AUM/projects 17 - decrease-AUM 204 - improve-AMP | 102 - maintain 16 - improve-AUM/projects 4 - decrease-AUM 142 - improve-AMP |
| AQUATIC HABITAT - Miles changed - primary cause | 67 - maintain 14 - improve-projects 73 - improve-AMP | 58 - maintain 10 - improve-projects 112 - decrease-AUM 178 - improve-AMP | 57 - maintain 23 - improve-AUM/projects 142 - improve-AMP | 55 - maintain 10 - improve-projects 14 - decrease-AUM 206 - improve-AMP | 66 - maintain 14 - improve-projects 142 - improve-AMP |
| WILDLIFE | | | | | |
| Population | Elk 5% decrease Mule Deer 5% decrease Antelope No change Sage Grouse Slight decrease Sharp-tailed Grouse Slight decrease Curlew Little change | 25% increase 25% increase 50 animal increase Slight increase Slight increase Slight decrease | 35% increase 35% increase 150 animal increase Moderate increase Moderate increase Little change | 20% increase 20% increase 50 animal increase Slight increase Slight increase Little change | 22% increase 33% increase 125 animal increase Slight increase Slight increase Little change |
| LIVESTOCK - 20-year AUM | 66,014 | 71,076 | 53,643 | 76,613 | 70,536 |
| WILD HORSES - 4-Mile Herd Size West Crane 20 years | 10 12 | 20 0 | 20 30 | 20 0 | 20 0 |
| LANDS | | | | | |
| Sale | 243 | 563 | 243 | 243 | 563 |
| Sale/Exchange | 1,397 | 33,409 | 0 | 25,730 | 10,107 |
| Exchange | 0 | 5,957 | 5,775 | 6,174 | 6,374 |
| DLE | 1,040 | 1,486 | 0 | 560 | 480 |
| Special Exc. | 0 | 0 | 11,306 | 0 | 0 |
| TOTAL | 2,680 | 41,415 | 17,324 | 32,727 | 17,524 |
| RIGHTS-OF-WAY - Acres restricted & resource values | 4,333 Cultural, recreation. | 6,627 Candidate & sensitive plants, cultural, recreation. | 11,966 Candidate & sensitive plants, cultural, recreation. | 9,706 Candidate & sensitive plants, cultural, recreation. | 6,696 Candidate & sensitive plants, cultural, recreation. |
| CULTURAL - National Register of Historic Places | No new sites nominated. One site reevaluated. | 8 sites nominated. One site reevaluated. | 8 sites nominated. One site reevaluated. | 8 sites nominated. One site reevaluated. | 8 sites nominated. One site reevaluated. |
| WILD AND SCENIC RIVERS | | | | | |
| Recommend for study | None. | South Fork Payette - 8 miles. | South Fork Payette - 8 miles. North Fork Payette - 6 miles. | South Fork Payette - 8 miles. | South Fork Payette - 8 miles. |
| RECREATION - Off-road vehicle designations | Open - 75% Limited - 25% Closed - Less than 1% | Open - 70% Limited - 30% Closed - Less than 1% | Open - Less than 1% Limited - 99% Closed - Less than 1% | Open - Less than 1% Limited - 99% Closed - Less than 1% | Open - 53% Limited - 47% Closed - Less than 1% |
| MINERALS - Locatable Acreage open Leasable | 94% 94% | 94% 94% | 93% 93% | 93% 94% | 94% 94% |
| FORESTRY - Commercial Forest Lands | 26,686 | 25,642 | 20,026 | 25,347 | 26,663 |
| Annual Harvest | 1 million board feet | 1.7 million board feet | 1/2 million board feet | 2.9 million board feet | 1 million board feet |
| Roads needed annually | 2 miles | 3.4 miles | 1 mile | 3.8 miles | 2 miles |
| FIRE - Annual suppression costs | \$109,300 | \$115,000 | \$109,300 | \$115,000 | \$112,000 |
| ECONOMICS - | | | | | |
| Direct Earnings | | | | | |
| Crop Agriculture | \$ 378,600 | \$ 551,500 | \$ 0 | \$ 207,800 | \$ 178,100 |
| Livestock (20-year) | \$ 2,700,000 | \$ 2,900,000 | \$ 2,200,000 | \$ 3,100,000 | \$ 2,900,000 |
| Recreation (20-year) | \$ 4,700,000 | \$ 4,700,000 | \$ 4,700,000 | \$ 4,700,000 | \$ 4,700,000 |
| Lumber/Wood | \$ 215,000 | \$ 387,000 | \$ 107,500 | \$ 645,000 | \$ 215,000 |
| Total Earnings | \$ 965,100 | \$ 1,405,800 | \$ 0 | \$ 529,700 | \$ 454,000 |
| Crop Agriculture | \$ 7,200,000 | \$ 7,600,000 | \$ 5,800,000 | \$ 8,200,000 | \$ 7,700,000 |
| Livestock (20-year) | \$10,600,000 | \$10,600,000 | \$10,600,000 | \$10,600,000 | \$10,600,000 |
| Lumber/Wood | \$ 515,000 | \$ 928,900 | \$ 257,500 | \$ 1,500,000 | \$ 515,000 |
| Direct Employment | | | | | |
| Crop Agriculture | 14 | 20 | 0 | 7 | 6 |
| Livestock (20-year) | 96 | 103 | 77 | 111 | 104 |
| Recreation (20-year) | 392 | 392 | 392 | 392 | 392 |
| Lumber/Wood | 10 | 18 | 5 | 30 | 10 |
| Total Employment | | | | | |
| Crop Agriculture | 45 | 65 | 0 | 24 | 21 |
| Livestock (20-year) | 333 | 354 | 266 | 382 | 357 |
| Recreation (20-year) | 884 | 884 | 884 | 884 | 884 |
| Lumber/Wood | 26 | 46 | 13 | 77 | 26 |
| AUM/Capital Value | | | | | |
| Low (20-year) | \$ 3,700,000 | \$ 4,000,000 | \$ 3,000,000 | \$ 4,300,000 | \$ 3,900,000 |
| High (20-year) | \$16,500,000 | \$17,800,000 | \$13,400,000 | \$19,200,000 | \$17,600,000 |
| Management Costs | \$ 442,000 | \$ 1,900,000 | \$ 1,600,000 | \$ 2,500,000 | \$ 1,800,000 |

CHAPTER 3

AFFECTED ENVIRONMENT

INTRODUCTION

This chapter describes the elements of the environment that could be significantly impacted by implementation of the alternatives under consideration. It describes the present environment and provides background data for the evaluation of environmental consequences presented in Chapter 4. Only those elements expected to be impacted or that have been identified as issues or management concerns are discussed.

RANGELAND RESOURCES

Soils

The soil resources in the Cascade RMP are extremely diverse. This diversity is a result of the variability in parent materials, slope, aspect, location on slope, elevation, climate, vegetative patterns, and time in place.

The soils in the RMP area may be separated into three main groups based on source of parent material and geology. The most extensive group are the soils formed in basalt residuum and colluvium. Many of these soils have been influenced by loess in the upper section of the profile. These soils dominate the north half of the RMP area (Washington, Adams and northern Gem counties). They are very shallow to deep, gently sloping to steep, well drained loam and clay loam soils. Many have greater than 35 percent rock fragments in the profile. They are typified by dark colored surface horizons and well developed subsurface horizons. They occur on old terraces, hills and mountains.

The next largest group consists of soils formed in mixed alluvium and lake laid deposits of the Idaho and Payette formations. These soils occur in the Black Canyon area and the hills and terraces extending north of the Emmett valley into the lower portion of Washington and Gem Counties and portions of Boise County. The soils in the Black Canyon area are moderately deep to deep, very gently sloping to moderately sloping, well-drained silt loams. Many are underlain by a hardpan at depths of 20 to 40 inches. They are typified by light colored surface horizons and moderate to well developed subsurface horizons. These soils are mildly to strongly alkaline. They occur on dissected terraces.

The soils north of the Emmett valley are moderately deep to deep, very gently sloping to steep, well-drained loams grading to coarse sandy loams. These soils are typified by light to dark surface horizons and subsurface horizons with weak to strong development. Alkalinity ranges from mild to strong. They occur on hilly dissected terraces.

The last major group consists of soils formed in residuum and colluvium derived from granitics of the Idaho Batholith. These soils occur on the mountains and foothills of the Boise Front and areas of Boise County. They are moderately deep to very deep, sloping to very steep, well-drained coarse textured soils. They are typified by having light to dark colored surface horizons and weak or no development in the subsurface horizons. The soils in the mountain areas of Boise County (particularly the forested areas) have colder temperatures and receive more moisture than those on the Boise Front.

Soils information for the RMP area was obtained from Soil Conservation Service (SCS) published soil surveys for Gem County Area (1965), Canyon County Area (1972), Payette County Area (1976), Ada County Area (1980), and the Valley Area (1981). Information for Washington and Adams County was obtained from an on-going survey by the SCS in those counties. Publication date for that survey is scheduled for 1989. Boise County soil information was obtained through field work conducted by the BLM in 1984.

Additional soil information and detailed soil maps for the RMP area are on file with the Boise District Office or can be obtained from the SCS.

Of the 487,466 acres in the RMP area, 311,952 acres or 64 percent have been classified as having a high or very high erosion hazard rating^{1/} (see Appendix A for a breakdown by allotment). The analysis was done on a map unit bases with each map unit assigned an erosion hazard rating. If over 30 percent of the map unit had a high or very high erosion hazard rating, the entire map unit was rated respectively. These ratings were based on the erosion susceptibility factor (k)^{2/} and slope. Soils on slopes exceeding 30 percent were considered to have a high erosion potential. Soils steeper than 60 percent were rated very high. The rationale behind this is in the event the vegetative cover or soil surface is disturbed, these soils would be highly susceptible to water/wind erosion. Most areas designated with a high or very high erosion hazard are due primarily to the slope factor and not the (k) factor.

Wind erosion is not significant in the RMP area. Some soils developed from sediments are in a moderate or high wind erodability group but these areas are small in extent and are not subject to prolonged high velocity surface winds.

The present erosion situation over the majority of the RMP area where ground cover is sufficient is within the tolerance limits acceptable for rangeland. These are between 1 to 3 tons/acre/year depending on soil characteristics and environmental conditions. The RMP area averages approximately two tons/acre/year soil loss. The current estimated soil loss

^{1/} The erosion hazard rating is the susceptibility of a soil to erosion when bare of vegetation.

^{2/} Soils with a (k) factor greater than .45 were considered to have a high erosion potential.

using the Universal Soil Loss Equation (USLE) for the three main soil groups discussed in the physical profile are as follows:

| | |
|-----------------------------|-----------------------------|
| Soils on basalt | - 1.5 to 2.0 tons/acre/year |
| Soils on sediments | - 2.0 to 2.5 tons/acre/year |
| Soils on granitics | - 2.0 to 2.5 tons/acre/year |
| Average for entire RMP area | - 2.0 tons/acre/year |

Erosion rates as calculated by the USLE are a function of many factors, most importantly, soil erodability (K factor), slope length and steepness, amount of cover, and rainfall intensity. It is important to note that the above figures are estimates and do not indicate absolute values. No actual measurements have been made and the calculations have been applied over a very broad and diverse landscape. It is also important to note that the USLE calculates long term average rainstorm caused erosion and will not necessarily reflect erosion caused by snowmelt runoff. Spring runoff may contribute significantly to the amount of soil erosion, especially at higher elevations in the RMP area. The USLE is used to measure soil loss from both sheet and rill erosion and does not take into account gully erosion.

Most of the current specific erosion problems are on soils derived from sedimentary and/or granitic parent materials. These are portions of the Boise Front, Black Canyon, and the southern portion of the Crane Creek planning unit. These soils are on steep, poorly vegetated slopes. Past damage has been caused by excessive livestock concentrations in certain areas, fire and fire suppression activities, vehicle use on unpaved roads, on two track trails, and ORV activity. Rill and gully erosion due to ORV use is a serious problem on the Boise Front area.

Another area of concern is along the Snake River canyon and its associated drainages in Washington and Adams counties. These soils, formed in basalt, occur on steep and very steep slopes. Past grazing practices and wildfires have altered or reduced much of the native vegetation. The combination of steep slopes and poor vegetative condition has led to an increase in soil loss and decreased soil productivity.

Many soils in the RMP area with a high or very high erosion hazard are associated with a poor ecological vegetative condition, approximately 65 percent, particularly the sedimentary soils and the lower elevation gently sloping soils on basalt. These areas are characterized by an increase in annual grass species (cheatgrass and/or medusahead wildrye^{1/}) and a decrease in perennial species. These areas also include sites that are sparsely vegetated compared to their potential due to some past actions or event. Areas that have a poor ecological vegetative condition have proven less effective in protecting the soil resource. Both plant composition and density are important in their effect on water infiltration rates. Plant density provides a protective vegetative and litter cover for the soil

^{1/} This is most prominent on the sedimentary areas. Medusahead wildrye seems to prefer soils with heavy textured surface and/or subsurface layers.

surface. This cover intercepts rain drops and dissipates impact velocity. Rain drop impact has a two fold effect on soils. First it causes particle detachment and displacement, and second it causes compaction of the soil surface by sealing pores. Both these actions affect infiltration and runoff. Pearce and Wooley (1936) found that fibrous rooted species (grasses) had greater infiltration rates than tap rooted species (shrubs and forbs). Perennial grass species are more effective than annual grass species. Annual species would provide basically the same surface protection, but are more susceptible to elimination by fire thereby exposing the soil. Perennial species have a much more substantial root system to bind the soil. Also perennial bunchgrasses catch more snow than annuals because of their upright nature, while annuals tend to lie flatter to the soil surface and bend over.

When infiltration rates are decreased the result is an increase in runoff and subsequent soil loss. Eventually this detached soil material enters streams, rivers and other bodies of water degrading these systems.

Also affecting infiltration is the amount of compaction and the resulting increase in bulk density of the soil surface. Trampling by livestock, ORV use, and road building are direct causes of compaction. Under moist soil conditions (spring and early summer) even light trampling can effectively compact the soils. This is especially critical on soils with heavy textured surface horizons. Soil compaction can also reduce vegetative productivity and vigor.

These impacts may be mitigated through identification of compaction prone soils and by appropriate management techniques such as season of use and location of livestock concentration areas. Rauzi and Hansen (1966) observed that concentrations of livestock led to the overuse of vegetation and soil compaction in areas such as floodplains, streambanks, reservoirs, and water facilities. Livestock concentrations around water facilities can lead to long term disturbance of soils and removal of vegetative ground cover. This is already evident in the RMP area.

Another form of erosion similar to water erosion in effect is trampling displacement. Like water erosion, trampling displacement is more evident as slopes increase. The RMP area is very prone to this form of erosion due to the many steep sideslopes utilized by livestock. This form occurs most readily when soils are very wet or very dry.

Implementation of grazing systems may have long-term beneficial effects on soils. Grazing systems that incorporate rest are more effective than annual season long use in most cases. Rest from livestock grazing during critical growing periods would improve plant vigor, reproduction, and litter accumulation thereby increasing the effective ground cover and adding beneficial organic matter to the soil. This would reduce amounts of bare ground and cause beneficial changes in soil structure, permeability and productivity. Demand for vegetative production for livestock and wildlife objectives result in an increased emphasis on soil productivity.

Mechanical treatments and rangeland burning expose large areas of bare soil to erosion initially, but an increase in vegetative cover after the first year lowers the potential for runoff and erosion.

Fire control measures such as dozer built firelines create drainage ways that concentrate overland flow and increase the velocity of water, leading to an increase in erosion. Surface disturbance associated with fire control may be mitigated by such practices as water barring and reseedling. This is especially important on the steep sedimentary and granitic soils. There generally will be a short-term soil loss before fire lines are revegetated.

Road construction can be a major source of erosion. Improper design, poor maintenance, soil compaction, road use, weather, and runoff can result at times in severe erosion problems. Sediment transported from these areas can impact the quality of streams and the associated aquatic community. Roads should be designed and constructed to prevent such damage. Areas with a high probability of road failure should be avoided.

ORV closures and limited use designations protect the watershed by decreasing disturbance and maintaining soil stability. ORV use outside of limited areas results in areas of compacted and displaced soil along with unnatural drainage channels that lead to increased runoff and erosion. This problem is very evident on the Boise Front and in the sedimentary soils in Gem and Payette counties. ORV use of public lands would result in significant impacts to the soils and watershed. Adverse impacts that may occur are reduction of forage production and loss of the hydrological function of the soils. The most obvious accelerated erosion and topsoil losses are caused by this land use. ORV limitations over the entire RMP area have a high probability of reducing such damage.

Activities that may cause an increase in runoff, soil compaction, and erosion or a decrease in water quality or soil productivity may be designed to avoid or mitigate long term impacts to an environmentally acceptable level. Soil resources are evaluated case-by-case as part of activity and project planning. See Appendices A and B and Map 3-3 for additional soils information.

Air Quality

Under the Clean Air Act (as amended, 1977), BLM-administered lands were given Class II air quality classification, which allows moderate deterioration associated with moderate, well-controlled industrial and population growth. BLM will manage all public lands as Class II unless they are reclassified by the State as a result of the procedures prescribed in the Clean Air Act (as amended, 1977). Administrative actions on the public lands will comply with the air quality classifications for that specific area.

Water Quality

Surface water quality of the perennial streams of the Cascade Resource Area fluctuates widely due to many natural and man caused factors. Because of the many factors involved such as snowmelt runoff, storm events, hydroelectric projects, irrigation returns, road building, mining and livestock grazing, water quality may vary from year to year. Two seasons of "point in time" sampling are only an indication of the low flow quality of these perennial streams on those dates sampled. All samples were taken on BLM land and due to the nature of land ownership patterns, upstream

activities impacting water quality will be reflected in these results. Twenty-one perennial streams were sampled during the summer of 1983 and 1984 during low streamflows. Sites and parameters sampled are available at the Boise District Office.

Overall, water quality of these perennial streams sampled was good. However, values for ammonia (4 sites), mercury (2 sites), iron (2 sites), total inorganic nitrogen (12 sites), ortho-phosphate (4 sites), turbidity (2 sites), total dissolved solids (1 site), and fecal coliform bacteria (11 sites) approached or exceeded standards used by the Idaho Department of Health and Welfare (1984).

Sedimentation was excessive on eight of the 21 sites evaluated. Streambed sedimentation was evaluated by an ocular method for substrate size percentage on the major perennial streams throughout the area. Most streams had sufficient gradient and flow volume to flush sediment downstream and prevent the covering of gravel and rubble by fine particles. Low gradient areas of the North Fork Payette River and the Weiser River are covered by fine sediments with the North Fork being almost totally a sand substrate. Agriculture is a major contributor to this problem.

Elsewhere poor watershed conditions due to range fires and livestock grazing, and eroding streambanks caused by loss of vegetative cover in riparian areas are the major causes of sedimentation. Best management practices for riparian ecosystems described in the resource management guidelines can substantially reduce sediment reaching streambeds.

Activities associated with agriculture, grazing, mining, timber harvest, road construction, and ORV use and natural events such as snowmelt, storm events, and fire are factors that influence water quality regardless of land ownership. When these factors occur on non-BLM lands upstream from BLM lands, water quality parameters will continue to fluctuate and water quality will continue to change on BLM lands.

The boundaries of the Cascade Resource Area encompasses 2.77 million acres. The BLM manages 487,466 acres of public lands within this boundary which is 18% of the total land. Upstream land ownership and management entities outside of the Cascade Resource Area boundary include the U.S. Forest Service, State of Idaho, and the private sector. Because of BLM's scattered land ownership pattern, limited percentage of land ownership, and lack of control on upstream land management practices and their subsequent influence on downstream water quality parameters, different BLM land use plans and management practices are not likely to substantially affect specific water quality parameters in a predictable, consistent manner. Consequently, water quality impact predictions in Chapter 4 resulting from the various BLM land use plan alternatives and management practices are addressed in terms of qualitative changes in overall water quality rather than in terms of site specific quantitative changes in specific water quality parameters. Regardless of which land use plan is implemented, the BLM is committed to monitoring water quality parameters and adjusting management practices to work towards improving water quality.

Vegetation

A range survey (modified SCS condition class survey with estimated production levels by soil mapping unit) was conducted in 1985. LANDSAT Multi-spectral scanner Digital Image Analysis combined with field verification and SCS soil information was used to establish vegetational mapping units and condition class.

Because time and funding restraints precluded the tabulation and assessment of slope and topography effects on total available forage an assumption will be made that the 5-year average demand is the same as the estimated current forage production. Monitoring studies will be used to verify the current carrying capacity and/or to establish the need for a change in active demand.

The various cover types inventoried were combined into the following types:

1. mixed grass
2. sagebrush/mixed grass
3. mountain brush/perennial grass
4. perennial grass/deciduous brush/or riparian
5. conifer/forest brush/perennial grass
6. conifer closed canopy
7. mixed annual grass
8. dense medusahead grass
9. riparian grassland
10. sparse sagebrush/medusahead grass
11. sagebrush/perennial grass

These 11 types were used to produce a present vegetation map for the entire resource area. See Maps 3-1 and 3-2 and Appendices C, D and E for further information.

Of particular interest in this inventory is the ability to locate and distinguish non-native homogeneous stands of medusahead grass (Taeniatherum caputmedusae) and cheatgrass brome (Bromus tectorum) from native plant communities. This inventory has established baseline information for monitoring the changes in distribution of these two species.

The vegetation zones along with the approximate area represented in the resource area include the following:

| | |
|---------------------------|-----|
| Sage/Grass Zone | 75% |
| Wheatgrass/Bluegrass Zone | 5% |
| Ponderosa Pine Zone | 5% |
| Douglas-Fir Zone | 10% |
| Spruce/Fir Zone | 5% |

Current condition acres by allotment were derived by a range survey and Landsat. Trend information, however, is generally lacking on most of the resource area. Several isolated 3x3 foot trend plots have been established in various parts of the resource area, however, not enough are present in

key use areas to make immediate use level adjustment decisions. The range survey will serve as baseline data for future allotment condition monitoring.

Ecological condition classes for the Cascade Resource Area rangelands have been estimated from the survey data as follows:

| | <u>Excellent</u> | <u>Good</u> | <u>Fair</u> | <u>Poor</u> | <u>Burned</u> | <u>Seeded</u> | <u>Total</u> |
|-------------|------------------|-------------|-------------|-------------|---------------|---------------|--------------|
| Total Acres | 1,922 | 33,301 | 210,315 | 196,329 | 2,234 | 9,730 | 453,731 |
| % | 1/2 | 7 | 47 | 43 | 1/2 | 2 | 100 |

Candidate and Sensitive Plant Species

Sensitive plant species are designated by a committee of technical botanists from throughout the state. Sensitive species are those whose restricted range, habitat requirements, or low population numbers make them vulnerable to elimination. The U.S. Fish and Wildlife Service maintains the federal lists of threatened and endangered plants as well as the candidates to those lists. There are no federally listed threatened or endangered plants in the Cascade Resource Area. There are several category two plants which are candidate species with insufficient biological information on hand to support listing at this time. These candidate species are Astragalus mulfordae, Allium aaseae, and Haplopappus radiatus.

Allium aaseae is threatened by surface mining and heavy ORV use. Allium aaseae is also present on private lands which have heavy ORV use and have been and are currently being destroyed by urbanization. Astragalus mulfordae is likewise threatened by ORV use and by urbanization.

Sensitive plant species in the Cascade Resource Area on BLM lands include: Astragalus vallis, Camassia cusickii, and Peraphyllum ramosissimum. In addition, several sensitive plants are known from nearby or adjacent private lands. These adjacent sensitive plants include: Bacopa rotundifolia, Carex aboriginum, Epipactis gigantea, Lindernia dubia, and Mimulus rigens.

Uncommon plants found in the Cascade Resource Area include Primula cusickii, Ranunculus oresterus, and Ceanothus prostratus.

Candidate and Sensitive Plant Species in the Cascade Resource Area

| <u>Latin Name</u> | <u>Common Name</u> | <u>Category</u> |
|--------------------------|------------------------|-----------------|
| Allium aaseae | Aase's onion | C2 |
| Astragalus mulfordae | mulford's milkvetch | C2 |
| Haplopappus radiatus | Snake River goldenweed | C2 |
| Astragalus vallis | Snake River milkvetch | Sensitive |
| Camassia cusickii | cusick's Camas | Sensitive |
| Peraphyllum ramosissimum | Squaw apple | Sensitive |

Following is a description of the areas containing known populations of these candidate and sensitive plant species.

Hulls Gulch Nature Trail

Allium aaseae occurs as several small populations along the trail on the Boise Front.

Rebecca Sand Hill

This is a hill with very deep sandy soil containing tree-like bitterbrush on the hill top and a vigorous needle and thread grassland on the south aspect. This hill supports the largest known population of Mulford's milkvetch. Apparently, this steep sandy hill has escaped heavy grazing. It is also crucial deer winter range in excellent range condition.

Lost Basin Grassland

An area in excellent range condition that is part National Forest and part BLM lands. It is the southern extent of the Pacific Northwest bunchgrass vegetation type, which lacks sagebrush. It is protected from grazing by cliffs and very steep side slopes.

Goodrich Creek Mosaic

An area of mixed bunch grassland Eriogonum, Lomatium, a shrub community type in good range condition. In addition, there is a good riparian zone along Goodrich Creek.

Beacon Hill

A small population of Allium aaseae on a south slope. This area also has suitable sandy soils which lack Allium aaseae. These suitable sites have had A. aaseae bulbs transplanted in an effort to study and establish new populations.

Pearl Site

An area with sandy soils with scattered populations of Allium aaseae. This represents over half the known populations of this onion. This area is also within the Little Gem Cycle Park. Mining and ORV use along with overgrazing and the subsequent spread of annuals, such as medusahead and cheatgrass threaten the future existence of Allium aaseae. Several areas appear to have been prime Allium aaseae sites which are presently eroded and support thistles, Kochia, and other weeds. The area has also been burned several times, and the vegetation has not recovered.

Buckwheat Flat

An Eriogonum thymoides community exists in relatively good range condition. It is a community type that is easily disturbed, due to its shallow soils and lack of steep slopes. Eriogonum thymoides, at one time, was considered to be a threatened plant species. It is a long-lived woody low growth shrub and appears to have very slow regeneration after being disturbed.

Affected Environment

Sand Capped Isolated Tract

A 40-acre isolated tract with a population of Allium aaseae. It is surrounded by private land, the creek bottom below is a sprinkler-irrigated pasture, and the slope is unfenced.

4th of July Meadow

This area contains the Snake River goldenweed, Haplopappus radiatus, which is a sensitive plant species. The general area is highly impacted by numerous disturbances such as road building, grazing, and weed invasion. The goldenweed persist despite these disturbances. The goldenweed occurs in the areas where there is good range condition.

Sagebrush Hill

This area contains a small population of Astragalus mulfordae. It is on a steep hill and appears to be protected by its topographic position.

Sand Hollow

This area contains the highly erosive sandy habitat of Aase's Onion. The habitat in this area is currently being damaged by heavy dirt-bike use, and is entirely within the Little Gem Cycle Park. Such disturbance of the very loose, coarse sandy soil of Aase's Onion habitat results in the exposure of the onion's roots. This causes the desiccation of the plant and its death - often prior to the plants completion of flowering and seed maturation. Motorcycle use will continually erode and destroy Allium aaseae and its habitat.

The Sand Hollow mosaic consists of two areas. These two areas are both 1-1/2 mile bands on BLM land on the north side of Sand Hollow. These areas contain ridgeline and upper slopes of coarse loamy sand which is the only type of soil in which Aase's Onion has been found. An estimated 9,350 Aase's Onion plants are living in these two bands. This Sand Hollow population consists of nearly 40% of the entire Aase's Onion species.

Summer Creek Mosaic

This 200 acre conglomerate of seven sites contains Snake River milkvetch (Astragalus vallis) and Cusick's Camas (Camassia cusickii). The milkvetch grows on ridgelines, and the camas is found in rugged, exposed stream bottoms. The distribution of both of these plants is restricted to rugged areas by heavy grazing. Both plants complete their life cycle by mid-June.

Perophyllum Rock

This rocky hill contains 21 Squaw Apple (Peraphyllum ramosissimum) plants. There are no seedlings present. The area is heavily browsed.

Riparian Habitat

Riparian surveys were conducted in the Cascade Resource Area on approximately 124 drainage miles. This included 57 miles of perennial streams and 67 miles of intermittent streams.

Using the woody riparian survey method, vegetation condition ratings are as follows:

| | |
|------------|--------------|
| Poor | - 2.3 miles |
| Fair | - 35.1 miles |
| Good | - 78.3 miles |
| Excellent | - 4.7 miles |
| Unsuitable | - 1.6 miles |

Since the survey method is designed to assess impacts to woody riparian vegetation from ungulate use, those areas identified as low fair to poor condition pertain only to ungulate use and not to site potential. Site potential is assessed at the time of survey. The field form contains existing canopy and potential canopy sections, where an estimate of potential canopy cover can be made.

The small amount of miles rated as poor condition was due generally to the resource area's topography, land ownership, and livestock use patterns. BLM ownership is well scattered in upland high moisture areas where vegetative growth excels. Public land occurs only on short reaches of drainages. The majority of these reaches rated good to excellent.

In lowland areas, with lowered soil moisture occurrence, BLM ownership is more blocked, but many drainages contain only herbaceous vegetation. Where woody riparian vegetation was present, condition classes ranged from fair to good with one drainage (Spring Creek) rating unsuitable due to more than 30% dead or decadent. The majority of lowland areas are in private ownership. It is in these areas where livestock concentrate and trail, and where much of the observed poor riparian condition exists.

Many ephemeral drainages have scatterings of woody riparian vegetation. The success of these plants is dependent on site potential. Site potential includes the presence, absence, and timeliness of soil moisture. Reaches of drainages lacking in woody riparian vegetation were not surveyed.

Upland perennial drainages typically start on Forest Service lands and cross BLM. These areas contain conifers, deciduous species, shrubs, and forbs. Lowland perennial/ephemeral drainages are found at lower elevations. Woody vegetation may be present along with shrubs and forbs.

Short steep ephemeral drainages are found on the west slopes of hills and mountains boarding the western edge of the Snake River. These drainages normally drain spring snow melt and have little to no value as fish habitat. Occurrence of woody riparian vegetation is scattered.

Natural factors such as fire and climatic events can reduce or eliminate woody riparian vegetation. Livestock grazing can suppress the regeneration of woody riparian species following these situations.

Aquatic/Fisheries Habitat

Approximately 81 miles of perennial streams were surveyed in the Cascade Resource Area. Perennial streams and rivers with 0.5 miles or more of continuous BLM ownership were evaluated and rated for the quality of six habitat features that are important components of a salmonid fishery. The Snake River and reservoir fisheries were compiled from literature reviews. There are no known federal threatened or endangered aquatic species in the resource area.

There are 33 species of fish found within the Cascade Resource Area. Sixteen of these species have been introduced into Idaho with 13 of these being warmwater fish to add to the recreational fishery of lowland reservoirs and rivers.

Redband trout, a BLM "sensitive species" and an Idaho "species of special concern" is found throughout the resource area and is managed by the Idaho Department of Fish and Game to protect populations and genetic integrity. The white sturgeon, also a "sensitive species" and "species of special concern," is suspected of inhabiting the free-flowing Snake River above Brownlee Reservoir. Habitat within the area is marginal at best however individuals from good upriver populations may move into this area.

The aquatic habitat and fishery resources of the CRA can be discussed in four parts corresponding to the Boise River, Payette River, Weiser River watersheds and the Snake River reservoirs below the town of Weiser.

The Boise River watershed has 4 miles of BLM land fronting streams and reservoirs. Scattered parcels are located at Quartzburg and Placerville on Granite Creek; Pioneererville and Centerville on Grimes Creek; and at Idaho City near Mores Creek. Fisheries values vary in these creeks and are managed by IDF&G as a coldwater put-and-take fishery. Non-point source pollution resulting from road construction, silviculture, livestock grazing and mining on non-BLM lands has impacted these creeks by increased sediment loads. Little impact to water quality results from BLM management actions of these parcels.

Two minor perennial streams with approximately 2 miles of BLM ownership each are located on the Boise front. Hulls Gulch and Cottonwood Creek have no fishery values, however are noteworthy from a water quality perspective. Livestock grazing, recreational vehicle use, road construction, range fires and mining activities which occur on public lands within these two drainages contribute to high sediment loads and bacteria levels.

Lucky Peak Reservoir, seven miles east of Boise, is a 2,850 surface acre reservoir designed for flood control and irrigation storage. Approximately 4 miles of shoreline is under BLM management. Livestock grazing is the dominate land use activity and has little impact on the fishery or water quality. Lucky Peak has warmwater and coldwater fishing opportunities.

The Payette River watershed has approximately 46 miles of river and stream fisheries and approximately 2,400 surface acres of reservoir fisheries within BLM ownership. Small, widely scattered parcels exist along 25 different streams and rivers. Eight miles of shoreline at Black Canyon Reservoir and one mile of shoreline at Paddock Valley Reservoir are managed for livestock grazing.

Fishery habitat in this watershed is quite varied and ranges from timber lined trout stream habitat of 6,000 feet elevation to the warmwater reservoir habitats of the lowlands. A good network of roads makes this diverse fishery accessible on a year-round basis. Population increases will put additional pressures on the aquatic resources.

Recreational fishing is important to the economy of the area. In an effort to maintain or enhance fishing opportunities Idaho Department of Fish and Game stocks hatchery raised trout in many of the resource areas waters.

The Weiser River watershed has about 28 miles of streams on BLM lands. Streams in the lower elevations do not provide good quality habitat. Irrigation diversions reduce natural streamflows. Water temperatures are elevated because of reduced flows and lack of shade. Water quality is degraded from livestock and agricultural uses. The upper Weiser River and the Little Weiser River support game fish species. Most of the other lower elevation streams support nongame fish or no fish.

Streams in the higher elevations generally have good aquatic habitat and trout populations. The streams have moderate to high gradients and good instream cover. Livestock use, access roads, and upstream logging practices have all contributed to minor impacts.

The Snake River watershed has about 10 stream miles on public lands. Aquatic habitat ranges from poor to excellent. The poor quality streams are degraded mainly by heavy livestock use and some mining activity. Most of the habitat supports trout populations.

FISH FOUND IN THE CASCADE RESOURCE AREA

| Common Name | Scientific Name | Origin |
|--------------------|----------------------------------|------------|
| White sturgeon | <u>Acipenser transmontanus</u> | native |
| Coho salmon | <u>Oncorhynchus kisutch</u> | introduced |
| Chinook salmon | <u>Oncorhynchus tshawytscha</u> | native |
| Kokanee | <u>Oncorhynchus nerka</u> | native |
| Mountain whitefish | <u>Prosopium williamsoni</u> | native |
| Redband trout | <u>Salmo sp.</u> | native |
| Rainbow trout | <u>Salmo gairdneri</u> | native |
| Cutthroat trout | <u>Salmo clarki</u> | native |
| Brown trout | <u>Salmo trutta</u> | introduced |
| Brook trout | <u>Salvelinus fontinalis</u> | introduced |
| Bull trout | <u>Salvelinus confluentus</u> | native |
| Chiselmouth | <u>Acrocheilus alutaceus</u> | native |
| Carp | <u>Cyprinus carpio</u> | introduced |
| Peamouth | <u>Mylocheilus caurinus</u> | native |
| Northern squawfish | <u>Ptychocheilus oregonensis</u> | native |
| Longnose dace | <u>Rhinichthys cataractae</u> | native |
| Speckled dace | <u>Rhinichthys osculus</u> | native |
| Redside shiner | <u>Richardsonius balteatus</u> | native |
| Bridgelip sucker | <u>Catostomus columbianus</u> | native |
| Largescale sucker | <u>Catostomus macrocheilus</u> | native |
| Black bullhead | <u>Ictalurus melas</u> | introduced |
| Brown bullhead | <u>Ictalurus nebulosus</u> | introduced |
| Channel catfish | <u>Ictalurus punctatus</u> | introduced |
| Tadpole madtom | <u>Noturus gyrinus</u> | introduced |
| Flathead catfish | <u>Pylodictis olivaris</u> | introduced |
| Pumpkinseed | <u>Lepomis gibbosus</u> | introduced |
| Warmouth | <u>Lepomis gulosus</u> | introduced |
| Bluegill | <u>Lepomis macrochirus</u> | introduced |
| Smallmouth bass | <u>Micropterus dolomieu</u> | introduced |
| Largemouth bass | <u>Micropterus salmoides</u> | introduced |
| Black crappie | <u>Pomoxis nigromaculatus</u> | introduced |
| Yellow perch | <u>Perca flavescens</u> | introduced |
| Mottled sculpin | <u>Cottus bairdi</u> | native |

Wildlife

A list of all known or potential wildlife species that may occur in the resource area is available in the Boise District Office. Emphasis will be directed only to those species which could be substantially affected either adversely or beneficially, by one or more of the alternatives.

Elk

The entire resource area including all land ownerships contains about 582,000 acres of elk winter habitat and an estimated population of about 3,500 animals. The herd composition is generally improving and the Idaho Department of Fish and Game goal for these populations is a 20% increase in the next 20 years.

Habitat use on BLM lands occurs mainly in the winter. Approximately 1,000 elk winter on BLM lands and about 150 elk use BLM lands on a yearlong basis. The largest concentration of wintering elk occurs along the Snake River between Weiser and Hells Canyon Dam. These areas have the highest use during severe winter weather conditions. This area is considered crucial elk winter range. There are approximately 166,000 acres of crucial elk winter habitat identified in the resource area. Of this acreage, 74,000 acres or 45% of the habitat is managed by BLM. Some early spring use does occur on BLM land. This use usually occurs before the snow has receded in the adjoining forested areas.

Elk prefer coniferous habitat but can be found in the interface between forest and non-forest communities. Throughout the year, they utilize ponderosa pine, grassland-shrub and grassland habitat types. In some areas during severe winters, agricultural lands are very important for herd survival. Primarily, elk are grazing animals. In the spring and summer, grass and forbs make up their diet. In fall and winter, dry grasses and browse are utilized. Forage areas seem to be in good condition but thermal and hiding cover seem to be limited.

Approximately 70% of the crucial winter habitat is currently in fair to good condition. About 55% of the winter habitat is in fair to good condition.

Mule Deer

Mule deer are the most abundant big game species in the RMP area. They are widely distributed and occupy a variety of habitat types. Approximately 7,000 mule deer utilize BLM lands. Eleven percent utilize BLM lands on a yearlong basis while 89% only use the area during winter months. The Idaho Fish and Game goal for these populations is a 30% increase over the next 20 years.

Winter habitat is the most critical factor for the deer population in the RMP area. There are approximately 697,000 acres of winter habitat in the resource area. Approximately 281,500 acres are lands administered by BLM. Approximately 53% of this winter habitat is considered crucial winter range. The Snake River breaks from Weiser north and areas along Four-Mile Creek and Little Willow Creek north of Emmett traditionally have large wintering herds of deer.

Mule deer are closely tied to riparian habitats. In the summer, they provide hiding cover, shade, fawning cover and a food source. In winter, thermal cover, a food source and hiding cover are provided before deep snows occur. The condition of these riparian zones affects the carrying capacity of the land for deer. Like deer, livestock concentrate in these areas

because of availability of succulent forage, shade and cover. Where these zones have been depleted by grazing rapid improvement can occur by reducing livestock pressure.

Mule deer feed on what is available. In the spring, grasses are utilized until forbs are available. Browse and forbs are preferred in the summer with all resources being used in the winter. The limiting factor in most deer populations is winter browse. Major browse species available include sagebrush, bitterbrush, rabbitbrush, chokecherry, service berry, ponderosa pine and rose. Woody vegetation is also necessary to provide fawning areas, hiding, and thermal cover needed by healthy deer populations.

In the past, frequent wildfires have eliminated or severely reduced shrub composition and weakened native perennial grasses and forbs. Over utilization by livestock in combination with the fires have reduced native species and have permitted the invasion of medusa and cheatgrass. Presently, extensive medusa ranges occupy areas which were traditionally native shrub grasslands.

About 55% of crucial winter habitat and 70% of winter habitat is in fair to good condition.

Antelope

The antelope population in the resource area numbers approximately 50 animals which roam over approximately 150,000 acres. The Idaho Department of Fish and Game have designated this area for transplants and the population should improve over the next 20 years.

The current wintering areas are located just north of Highway 52 along Big Willow and Little Willow Creeks. The areas cover approximately 20,550 acres with 4,400 acres of BLM land and 16,150 acres of private land.

The most commonly used habitats are grassland, grassland-shrub and shrub. Sagebrush and rabbitbrush are important components of the winter diet. Grass and forbs are the principle diet components in spring and summer while forbs and browse are equal in importance for fall diets. Most of the antelope habitat is marginal which is demonstrated by low production. The cause of low production seems to be degradation of habitat due to overutilization by livestock and wildfires. Lack of suitable fawning areas and the scarcity of forbs in an area dominated by medusa and cheatgrass also contribute to low herd production. Suitable forage and thermal cover is lacking in winter ranges.

About 96% of the winter range is in poor condition.

Sage Grouse

Sage grouse are found throughout the area north of the Payette River. There are approximately 186,245 acres of sage grouse habitat in the RMP area. The sage grouse habitat has been subject to sheep and cattle grazing for many years. The lack of forbs may have an added effect on the quality of the habitat. In some areas the lack of mature sagebrush may also be a limiting factor for nesting areas and winter thermal cover. Overall, 40% of

the habitat in the resource area is in poor condition. Nesting habitat is fair in most areas. There are approximately 50 active and historical strutting grounds (mating areas) located throughout the resource area.

The population trend shows a steady decline. The main cause of this seems to be from a continual loss of habitat. This loss is due to sagebrush eradication, the overall conversion of native habitat to agriculture and most recently, to range fires. In recent years the population has experienced further declines due to adverse winter and spring weather conditions.

Other Wildlife

Other important wildlife species found in the area include black bear, mountain lion, blue grouse, Franklin grouse, ring-necked pheasant, Hungarian partridge, chukar partridge, wild turkeys, ducks and geese. Since these species would not be significantly impacted, they will not be discussed further.

Populations of ruffed grouse, valley quail, and mourning dove are affected by conditions in riparian zones. Their requirements would be met in all alternatives and will not be discussed further.

Sensitive Animal Species

Columbian Sharp-tailed Grouse

The Columbian sharp-tailed grouse is almost extinct in western Idaho. The remnant populations are small and scattered. The entire population is estimated at less than 300 birds. The largest known concentration is located 14 miles north of Weiser in the Sage Creek drainage. Four of the five known dancing grounds are located in this area. The fifth known dancing ground is located in the Rock Creek drainage, west of Sage Creek. Other small scattered populations are located around Council. The decline of this native species is directly associated with loss of habitat. Two primary reasons for this loss is overgrazing of native range and conversion of range to agricultural lands.

There are approximately 109,000 acres of sharp-tailed grouse habitat identified in the resource area. Of this acreage, 21% is managed by the BLM. Currently 55% of the habitat on BLM land is in fair to good condition.

Long-billed Curlew

Curlew populations in the RMP area are relatively high. There are approximately 1,500 to 2,000 breeding pairs utilizing the grasslands in the resource area. One thousand of these are found in the Black Canyon Curlew Area. This is one of the largest breeding populations in the United States. Optimum habitat for curlew is wide open areas with very short vegetation. In most cases, optimum habitat for curlew is the worst habitat for most species. The lower the vegetation structure the better the habitat for the curlew.

Other Sensitive Species

Other sensitive species found in the area include bobcat, river otter, osprey, burrowing owl, mountain quail, and Idaho ground squirrel. Since these populations would not be impacted by any of the alternatives, they will not be discussed further.

Endangered and Candidate Species

There are two species found in the area which occur on the Federal threatened and endangered lists. These are the bald eagle and peregrine falcon which are listed as endangered.

Nesting bald eagles are found in the vicinity of Cascade Lake. They may also occur in the vicinity of Hells Canyon Dam.. Wintering habitat for approximately 100 eagles is located primarily along the Snake, Boise, Weiser and Payette River systems. Winter counts have varied over the years but seem to indicate a decrease in the use of available winter habitat. The Oxbow Dam stretch of the Snake River system is the most important habitat used by wintering bald eagles in the RMP area. The general habitat condition is only fair, due to the lack of roosting and perching trees.

Peregrine falcons no longer occur naturally in the area but are sometimes seen during migration. Efforts have been made to establish a nesting pair of falcons near Cascade Lake.

There are also two candidate species found in the area. They are the Swainson's hawk and the ferruginous hawk. These two species nest throughout the resource area.

Since neither of the endangered or the candidate species would be affected by any of the alternatives, they will not be discussed further.

Livestock

The Cascade Resource Area consists of 2,771,188 acres of which 487,466 acres are public lands. The grazing program in the area includes virtually all of the public land acreage, a majority of the 182,534 acres of state land and portions of 2,101,228 acres of private lands.

There are 338 allotments in the area that have a current total active preference of 72,571 AUMs (Animal Unit Months) for livestock forage. The five year average use is for 66,424 AUMs which is 6,147 AUMs less than active preference.

The 338 grazing allotments are utilized by 244 livestock ranching permittees. The grazing preference used by each ranges from 4 AUMs to over 4,253 AUMs.

An allotment stratification by management intensity (MIC) has been completed. Results are as follows:

| Management Category | Number of Allotments | Percent of Allotments | BLM Acres in Category | Percent of Resource Area |
|---------------------|----------------------|-----------------------|-----------------------|--------------------------|
| Maintain | 52 | 15 | 46,647 | 9 |
| Improve | 78 | 23 | 356,101 | 73 |
| Custodial | 208 | 62 | 62,172 | 13 |
| Unallotted | | | 22,546 | 5 |
| TOTALS | 338 | 100 | 487,466 | 100 |

There are currently 7 allotment management plans (AMPS) in the area. These AMPs were developed and began operation prior to 1975. Grazing systems were developed ranging from rest rotation to deferred use to season long use.

There are several designated stock driveways within the area. They are used extensively by about 20,000 trailing sheep two times a year. There are presently approximately 63,000 acres in the stock driveways. See Map 7 and Appendices E, F, and G for further information.

Wild Horses

The Cascade Resource Area currently recognizes and manages two wild horse herds: The Four Mile Herd and the West Crane Herd.

The Four Mile wild horse herd fluctuates between 10 and 75 animals depending upon the ability of the BLM to gather and adopt them out. The horses graze on about 18,500 acres in common with 1 livestock permittee licensed for 4,700 AUMs. To reduce the effects of increased wild horse numbers the permittee has taken voluntary non-use of 424 AUMs since 1977. This has in turn reduced depredation of private lands and critical mule deer winter range. In 1982 and 1984 horses were gathered in Four Mile and the present population is approximately 10-12 head.

The West Crane wild horse herd currently extends its range over about 10,280 acres. The herd generally has 10-25 animals. They compete with about 1,748 AUMs of livestock (cattle, sheep and horses) forage needs on the allotment utilized by 7 permittees. To facilitate the forage of wild horses, wildlife and livestock, the livestock carrying capacity was reduced 24% in 1977. Pasture management has been unsuccessful in the past because of the wild horses. Fences have been broken through and horses range throughout the allotment. Consequently range forage conditions have decreased in many of the pastures. Horses were gathered in 1977 and 1982 and the present population numbers between 15 and 20 head.

LANDS AND REALTY RESOURCES

Lands

The RA currently has 13 pending DLE applications on file for a total of 2,928 acres. Of the total acreage, 870 acres have been classified suitable

for entry, 592 acres have been found unsuitable for entry, and 1,466 acres remain to be classified.

There are three exchange proposals currently pending in the RA. The first exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land. The exchange would consolidate State and public lands. The second exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management and the selected public land has been recommended for sale or exchange in accordance with the Black Canyon MFP. The third exchange is a private proposal to acquire 83 acres of public land for 14 acres of private land. The selected public land has been recommended for sale or exchange in accordance with the Black Canyon MFP. The exchange would improve management by blocking public lands.

There are nine outstanding R&PP leases; five are for sanitary landfills, one sand and gravel storage site, one motorcycle park, one proposed school site, and one shooting range.

Rights-of-Ways

The RA is traversed by numerous man-made developments including at least eight utility transmission lines (69 KV and greater), two buried gas lines, the Union Pacific Railroad system, numerous paved highways and roads such as I-84, U.S. 95 and Highway 55, and several major irrigation structures such as the New York and Mora Canals, Black Canyon Irrigation Canal and the Farmers Union Canal.

In addition to the linear developments there are also five authorized communication sites. These include sites on Squaw Butte and Crown Point and one site each northeast of Parma, south of Emmett and west of Crouch.

The RA currently has one issued and two pending leases. All three are for occupancy.

A significant number of permits have been issued. Currently 19 permits are existing and include a variety of users, including agriculture (7), anemometer site (1), occupancy (1), airstrip (2), apiary (7), and seismic data collection site (1).

Withdrawals

Approximately 31,000 acres of public land are withdrawn in the RA. This land is managed cooperatively or solely by other federal agencies such as the Bureau of Reclamation, U.S. Fish and Wildlife Service, U.S. Geological Survey and Department of Defense. As directed by Section 204(L) of the Federal Land Policy and Management Act of 1976, these withdrawals are being systematically reviewed to determine if they still serve their intended purpose.

Section 204(a) of FLPMA also authorizes the Secretary of the Interior to make, modify, extend, or revoke withdrawals such as those establishing stock

driveways. Currently, the RA has approximately 63,000 acres withdrawn for stock driveway purposes.

The RA also has one pending withdrawal application filed by the U.S. Fish and Wildlife service. The application was filed in 1972 with the intent of closing an unspecified number of acres on the Payette River to mining.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

The Cascade Resource Area has been inventoried for cultural resources at the Class II and III levels. Thirty-five prehistoric and five historic sites were discovered during this inventory. Prehistoric sites included quarries, workshops, habitation sites and undefined lithic scatters, typical of late archaic sites of the northern Great Basin with possible paleo and Cascade components. Historic sites included rock structures (cairns) and scatters of historic debris associated with late 19th and early 20th century ranching activities. Sites discovered during the inventory have been evaluated to determine condition. The results of this evaluation show that 20% are in poor condition, 40% in fair condition and 30% in good condition. None of the cultural resource sites evaluated were in excellent condition and 10% had been destroyed. Agents of deterioration which are currently or have in the past caused impacts to sites are erosion (40%), livestock trampling (50%), road construction (27%) and reservoir construction (3%).

Livestock trampling is impacting cultural resource sites located between 3300' and 4500' elevations within 1/4 mile or adjacent to springs and perennial streams (high cultural resource site density areas) more heavily than elsewhere in the resource area.

Erosion (wind and water) contributes to the deterioration of sites already impacted by livestock trampling and water erosion impacts sites located on the banks of drainages and in areas subjected to recurrent flooding.

Important cultural resource sites in the Cascade Resource Area are identified below.

There is one cultural resource site in the Cascade Resource Area on BLM administered public land which has been placed on the National Register of Historic Places (NRHP). This is the Placerville Historical District consisting of historic structures within the townsite of Placerville representing late 19th and early 20th century mining activities in the Boise Basin.

The Placerville Historic District was accepted to the NRHP based on the architectural features of existing historic structures. The archaeological potential of this district has not been determined. The BLM manages approximately 8 acres within the 100 acre Historic District. No other cultural sites in the Cascade Resource Area are currently receiving special protection.

The Greys Creek cultural resource site consists of a large lithic scatter running along the bank of Grey's Creek for approximately 400 meters, and is 40,000 square meters total area. An intermittent tributary of Grey's Creek runs through a portion of the site, exposing buried artifacts. The artifact assemblage includes large bifaces, blades and projectile points which indicate a late archaic period of occupation. A portion of the site is on private land on which a corral has been constructed and livestock graze the area on both private and BLM administered land. The Greys Creek site is deteriorating rapidly from the effects of livestock trampling and erosion.

The Indian Creek cultural resource site is located on a terrace adjacent to an intermittent tributary to Indian Creek and consists of an abundance of secondary and final shaping flake debitage of black fine grained basalt and obsidian. One intact projectile point (Cascade) was collected. A circular grinding stone 11" in diameter with a worn circular depression in the center 4" wide and 3" deep was observed on the site. The site is being seriously damaged by the effects of livestock trampling and erosion. The Indian Creek site is deteriorating from the impacts of livestock trampling and erosion. This site may represent cultural influences different from the typical Great Basin culture normally associated with this area.

The Milk Creek cultural resource site is an extensive lithic workshop/campsite. Abundant secondary basalt flake debitage litters the ground and lesser amounts of primary debitage are also present. Some obsidian final shaping debitage has been observed. The site is adjacent to a manmade reservoir which impounds an intermittent spring flow. The reservoir is about 30 x 30 meters in area and probably sits on portions of the original site. The context of observed artifacts is questionable because the area of highest artifact concentration apparently lies in excavated materials in the area now occupied by the reservoir. The context and condition of the site have also been affected by the large numbers of cattle that have severely trampled the area around the reservoir. The Milk Creek site is in poor condition.

The Cabin Creek cultural resource site is a large campsite on both sides of an intermittent drainage running into Cabin Creek. The site is heavily disturbed by livestock trampling and erosion. Lithic material includes fine-grained basalt, black ignimbrite, obsidian and multi-colored chert. Cores, primary, secondary and finishing flakes are present as well as finished tool forms. Many utilized flakes, an obsidian biface base, a spokeshave and an obsidian biface fragment were observed as well as an excellent groundstone mortar (left in place) and fire cracked rock. Flakes are eroding out of the streambank to a depth of about one meter. Historic artifacts are also present. The Cabin Creek site is deteriorating from the effects of livestock trampling and erosion.

Pioneerville, Quartzburg, Centerville, and Mineral are historic townsites which represent early settlement and mining activity in Idaho. The BLM manages only portions of the sections in which townsites are located (Pioneerville: 581.8 acres; Quartzburg: 385.75 acres; Centerville: 515.79 acres; Mineral: 428.97 acres).

Paleontologic Resources

The Cascade area has not been researched for paleontologic materials. All sedimentary formations are known to have produced specimens. Many localities are known to produce leaf specimens and/or petrified wood. Fossil vertebrate finds have been highly significant but locality data is limited. Other fossil materials include the invertebrates. At present, pelecypods and snails are the only invertebrates known from the Cascade Resource Area.

A general interest in paleontology in the Cascade Resource Area continues. Hobby collecting of petrified wood is very popular with fossil leaf collecting of secondary interest. Vertebrate collecting is presently limited to professional research.

There are no areas presently closed to collecting. Little information on localities and their significance is available as no paleo inventory has been completed on the area.

RECREATION RESOURCES

Recreation

Power and floatboating, fishing, and water play sports are all popular and occur on a variety of water bodies. Major rivers include the Payette, Snake, Boise and Weiser. Major lakes and reservoirs include Payette, Cascade, Paddock, Lowell, Black Canyon, Crane Creek, Oxbow, Brownlee and Lucky Peak. Numerous other smaller streams and ponds also offer opportunities. Segments of the North and South Forks of the Payette River totaling 106 miles are under consideration for inclusion into the National Wild and Scenic Rivers System. They have both been recommended as having potential for inclusion in a State Natural and Recreation System through the National Park Service's evaluation of the remaining potential river additions. One segment of the North Fork is continuous Class V whitewater and has been judged by kayaker aficionados to be one of the most challenging, and accessible runs anywhere in the world.

Hunting for big/small game, upland birds and waterfowl is a major use. Also popular is biking, horseback riding, camping, rock-collecting and sightseeing. Hanggliding is popular from Squaw Butte, Pickles Butte and the Boise Front. The state championships are held yearly from Squaw butte. Annual field dog trials and horse endurance rides have been held regularly in the resource area, and draw local and non-local participants. Off-road vehicle use is another major recreational use in the Cascade Resource Area. Aside from its dispersed use throughout the Area, concentrated use of "play areas" for ORVs have emerged in nine areas. These areas are located near the towns of Weiser, Payette, Parma, Emmett, Nampa, Eagle and Boise.

Snow-based activities are limited due to the lower elevations of most BLM lands. Snowmobiling and cross-country skiing opportunities are available in the upper elevations of the Boise Front and in northern areas of the resource area.

The Cascade Resource Area is divided into three Special Recreation Management areas (Boise Front, Oxbow-Brownlee and Payette River Corridors) and two Extensive Recreation Management areas (Treasure Valley and Cascade Uplands). In addition, one Wilderness Study Area has been identified north of McCall.

Boise Front SRMA (12,000 acres)

In Boise's "backyard" is one of the most popular and intensively used recreation areas in the state. BLM facilities include one interpretive National Recreation Trail (5 miles), approximately 20 miles of multi-purpose trails and an ORV parking area with loading ramp. An additional 40-50 miles of roads and trails are used for recreation but lie within the jurisdiction of local, state or other federal agencies. Popular recreational activities on the Boise Front include ORV use, hunting, horseback-riding, hanggliding, hiking, sightseeing and environmental education. Water sports, fishing and boating take place on Lucky Peak Reservoir. As the population of Boise and the Treasure Valley grows, so does the recreational pressure on the Boise Front. Historically, there has been a conflict with the various user groups, specifically between the ORV enthusiasts and other users. One ski area operates in the area, and state operated water sports, picnic and boat ramp facilities are located in the extreme southern portion of the SRMA along Lucky Peak Reservoir. The 1983 SCORP population growth estimate for Ada County (1980-2000) is about 57%.

Oxbow-Brownlee SRMA (40,000 acres)

This SRMA is comprised of Oxbow and Brownlee Reservoirs on the Snake River. They form the boundary between Idaho and Oregon, and are popular for fishing, boating and water sports. The hills adjacent to the reservoir receive hunting, rockhounding, and ORV use. Also within the SRMA are 200 acres of sand dunes at Olds Ferry, which receive ORV use. BLM facilities in the SRMA consist of one campground and picnic area with a boat dock and ramp on Brownlee Reservoir. Other facilities consist of two privately owned campgrounds with boat ramps. Several more campgrounds with boat ramps on Brownlee Reservoir are located on the Oregon side. Commercial carp fishing is occurring in the reservoirs but does not appear to conflict with the sport-fishing activities. ORV use in the sand dune area is apparently having little vegetative impact but increased use in the steep ridges and canyons adjacent to the water is manifesting itself in unplanned trails and hillclimbs with subsequent erosion problems and visual impacts. BLM's Steck Campground is heavily used by local and non-local visitors. This high use has necessitated more intensive management each year. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 16 to 25%.

Payette River Corridors SRMA (19,000 acres)

This area consists of the narrow river valleys containing segments of the North Fork, South Fork and main Payette River. Public land ownership along the north fork and mainstem is sparse and scattered, but more substantial along the south fork. The primary recreation uses are float boating, jet boating, fishing, other water sports and sightseeing. The segment of the north fork from Smiths Ferry to Banks is a world class Class V whitewater kayaking river, while other segments of the river offer a full

range of kayaking, rafting, canoeing, and jet boating opportunities. Existing recreation facilities in this SRMA include five federal and one state campground and several unimproved public access points. There are no improved BLM facilities. Access to some of the isolated public lands is a problem, especially those large blocks lying on the south side of the South Fork of the Payette River. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 7 to 34%.

Cascade Uplands Extensive Recreation Management Area (334,000 acres)

This is the largest of the RMAs within the Cascade Resource Area. It is primarily comprised of foothills and mountains. The historic townsites of Idaho City, Quartzburg, Centerville, Placerville and Pioneerville lie within this ERMA and receive varying degrees of tourist visits. Prominent water bodies for recreational use include Paddock, Payette and Cascade Reservoirs, the Weiser River and a segment of the North Fork of the Payette River.

Existing recreational facilities within the area include four federal and nineteen private campgrounds, several federal, state and local picnic areas and two ski areas. There are no improved BLM facilities in the RMA. Popular recreational uses in the area include boating, fishing and other water sports on the lakes, rivers and streams, all types of hunting, horseback-riding, hanggliding from Squaw Butte, rockhounding, hiking, cross-country skiing and ORV use. Snowmobiling is concentrated in the northern and higher elevation regions of the area. One intensively used motorcycle area has been leased under an R&PP to the Payette County Recreational District. The area is now a cycle park and improvements consist of trails, parking, restrooms, loading ramp and a BMX bicycle race track. The major problem in the ERMA is the abundance of scattered tracts of public lands and subsequent access and management. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 16 to 25%.

Treasure Valley Extensive Recreation Management Area (72,000 acres)

The majority of the land within this area is privately owned agricultural land. The public lands are primarily low, rolling hills, some small buttes, and a section of foothills to the Boise Ridge. It is the most densely populated area of the state and contains the towns of Boise, Nampa, Caldwell and Emmett. Recreational highlights on public lands in the area include hanggliding from Pickles butte, fishing and boating in the Snake, Boise and Payette Rivers, Black Canyon Reservoir, and Lake Lowell, hunting, horseback-riding (especially north of Eagle and south of Emmett) and ORV use. Although ORV use is dispersed throughout the area, several intensive use areas exist including areas north of Parma, south of Emmett and south of Nampa at Pickles Butte. There is also the Little Gem Cycle Park several miles east of Emmett. There are no improved facilities in the park other than a parking area and trails. The cycle park is a combination of private and public lands. Recreational facilities within the ERMA include six private and two local jurisdiction campgrounds, seven picnic areas and four water sports areas. Numerous public access points exist along rivers, canals and Lake Lowell. Future population growth in this area can only increase recreational pressure, not only within this ERMA but in adjacent areas as well. The 1983 SCORP population growth estimate for the vicinity (1980-2000) is 34 to 57%.

Box Creek Wilderness Study Area (110-91A)

A Wilderness Study Area, Box Creek (#110-91A), is located in the northern part of the Cascade Uplands ERMA. It is only 440 acres, but adjacent to the Lick Creek RARE II unit. The BLM area is similar to the Forest Service administered area in landform and vegetation, both consisting of rolling to extremely steep and broken terrain supporting mixed conifer forests of primarily Douglas-fir and subalpine fir; pine, spruce, larch and aspen. The forest cover is broken frequently by large granite outcrops. The major drainage is Box Creek.

Visual

The public land has been inventoried to determine the quality of the visual resources in the Cascade Resource Area. Evaluation of the land was based on landform, vegetation, water, color, scarcity, influence of adjacent scenery and cultural modifications (intrusions) in accordance with the visual resource management (VRM) system presented in BLM Manual 8410.

The VRM system provides for management of visual resources to prevent undue degradation. Management classes based on scenic quality, sensitivity level, and distance zone are established to provide appropriate objectives for management. Locations of the classes are shown on Map 3-8. The acreages of public land in each VRM class would be the same in each alternative as they are now. The VRM classes and approximate acreages are: Class II - 81,000 acres; Class III - 383,466 acres; Class IV - 23,000 acres. Refer to Appendix K for explanation of VRM classes.

Recreation Opportunity Spectrum (ROS)

The Cascade Resource Area has been classified as follows:

| | |
|--------------------------|-----------------|
| Roaded Natural | - 445,391 acres |
| Semi-Primitive Motorized | - 42,075 acres |

The Recreation Opportunity Spectrum is explained in Appendix L. It will not be discussed further in this document.

MINERAL RESOURCES

Leasables

Oil and Gas

The Cascade Resource Area has had much interest and activity in oil and gas exploration since the turn of the century. Shows of oil and gas have been made and leasing activity has continued to the present time in the sedimentary units of the Cascade area. Shows of methane gas that have been detected in over 200 water wells throughout southwestern Idaho indicate presence of small accumulations of flammable gas possibly suitable for domestic energy needs of individual residences.

Currently low prices of oil and gas have had the effect of greatly reduced petroleum exploration all over the U.S. Leasing and exploration in

an extremely speculative area as the Cascade RA will most likely be minimal in the immediate future. Beyond the immediate future, exploration in the Cascade RA will probably be cyclical and vary with the economics of the oil and gas industry. There are currently few leases within the Cascade Resource Area. There is no geophysical or drilling activity occurring at this time.

There are no producing oil or gas wells in Idaho at this time.

No major areas currently exist as completely closed to leasing. Much of the area is however seasonally closed because of wildlife habitat requirements. This has adversely affected one geophysical operation. It is assumed for analysis purposes that oil and gas activities will continue at about the current level.

Geothermal

The Cascade Resource Area has not had any significant geothermal interest previous to the mid 1970's. Geothermal resources in the resource area have not been developed beyond limited low temperature uses such as space heating and bathing. Production wells are currently limited to the Boise Geothermal project. Exploration and research in the CRA has been insufficient to completely define the nature and extent of geothermal resources. However, surface temperatures of springs within the CRA are as high as 92°C (198°F) with many wells in the 20°-40°C (68°-104°F) range. The primary known hydrothermal systems within the CRA occur at Crane Creek, Boise, and northwest of Weiser.

There are no active drilling or exploration projects in the resource area at this time. The current availability of economic oil and gas energy sources has resulted in a low demand for alternative energy sources such as geothermal. While energy trends have proven difficult to project, it is believed that the demand for geothermal energy will remain low for the foreseeable future. A national shortage of oil and gas could result in increased demand with resultant increase in exploration for geothermal resources in the CRA.

No major areas currently exist as completely closed to geothermal leasing. Much of the resource area is however seasonally closed because of wildlife habitat requirements. It is assumed for analysis purposes that geothermal activities will continue at about the current level.

Other leasable minerals in the area include coal and hard rock leasing on acquired lands. The coal resource is a low grade uneconomic deposit Near Horseshoe Bend. Hard rock leasing activity has been limited to minor areas within the National Forest lands and has not lead to any mineral production. These other leasable minerals will not be addressed further.

Locatables

The Cascade Resource Area has had extensive mineral interest and activity for over 125 years. Twenty-one mining districts affect lands within or immediately adjacent to the resource area. Most of the districts were set up for placer gold. One was set up for coal and one for mercury. The others were lode deposits containing such minerals as gold, silver, lead and copper.

Other locatable minerals of interest in the area include zinc, molybdenum, manganese, iron, bismuth, monazite, gypsum, diatomite and others. None of these deposits are known to be economic under the existing market conditions.

Mining exploration and production has been sporadic over time but a general interest has been consistent. Over 2,700 mining claims presently affect or are within one mile of lands with minerals managed by the Cascade Resource Area.

Current locatable minerals production in the resource area consists of "hobby minerals" (nodules, geodes, agate, opal, etc.), minor placer gold production, one active lode gold claim and significant silica sand production.

Withdrawals currently affect 6% of the public lands within the resource area. This is not currently a significant impact as compared to the general economic situation for the minerals industry at this time. It is assumed for analysis purposes that locatable mineral activity will increase slightly.

Salables

The Cascade Resource Area has had highly significant production of mineral materials. Sand and gravel and quarry rock for road construction and maintenance, has been the major use of salable minerals found on public lands within the resource area. Cinders for road use, potting soil and decorative purposes and basalt drain rock have also been sold from the public lands within the Cascade Resource Area.

Other salable minerals of interest in the area include clay, petrified wood, sand and building stone. None of these are currently being sold from public lands within this resource area.

Exploration for and production of salable minerals is strongly tied to local market conditions. Production has been sporadic but has generally increased with increased population and improved economic conditions. There are currently 3 mineral material sale sites, 16 free use sites, and 2 community pit sites in the Cascade Resource Area.

Current salable mineral material production in the resource area consists of sand, sand and gravel, basalt quarry rock and cinders. Most of the production is free use to local road districts for maintenance of county roads.

No areas that are managed by BLM within the Cascade Resource Area are currently closed to mineral material production. It is assumed for analysis purposes that interest and need will continue at about the current level.

FOREST RESOURCES

Timber

The Cascade Resource Area contains 31,895 acres of commercial forest lands capable of producing at least 20 cubic feet of wood per acre per year of commercial tree species. The commercial trees growing on these Commercial Forest Lands (CFL) are ponderosa pine, Douglas-fir, grand fir, lodgepole

pine, subalpine fir, and Engelmann spruce. The CFL was identified through a Timber Production Capability Classification (TPCC) process in two reports completed in 1977 and 1980 covering separate parts of the Cascade Resource Area. The classification criteria and acreage summations of these reports are considered superior to the acreage summations of the 1975 forest inventory and are used in this analysis.

The TPCC determined that 26,686 acres or 84% of the total CFL is capable of sustaining long-term timber production. These lands are referred to as Suitable Commercial Forest Land. An additional 70 acres is being managed as a seed orchard.

The remaining 5,139 acres or 16% of the total CFL were determined through TPCC to be incapable of sustained long-term timber production. These lands are referred to as Non-suitable Commercial Forest Land. They are mostly fragile lands or lands which cannot reforest adequately.

The Cascade Resource Area contains 873 acres of woodland. Woodland is land producing trees that are not typically utilized as sawtimber. Woodland can include non-suitable commercial forest land but cannot include CFL in the allowable cut-base. Woodland includes the minor acreages of deciduous forests such as aspen, cottonwood, and cherry and lands that cannot be reforested within 15 years.

According to the 1975 forest inventory, with multiple use restrictions on 6,750 acres for topography, watershed and scenic corridors, the Resource Area can support an annual allowable cut of 1.7 million board feet without intensive management and 2.9 million board feet with intensive management.

Under the present conditions, based on funding and personnel, the area has an allowable cut of 1.0 million board feet.

FIRE MANAGEMENT

Wildfires have burned approximately 132,204 acres in the fifteen-year period of 1970-1985 in the Cascade Resource Area.

Analysis of available data indicate that the Cascade Resource Area has an average of 39.9 fires per year, based on the fifteen-year average. Forty-one percent of these fires occur during the month of July, followed by 30% of the fires occurring in the month of August. The months of June and September have a fire occurrence of 13% and 11%, respectively.

Approximately 8,814 acres is the average acreage burned per year in the resource area. The 1985 wildfires consumed an above-average acreage of 10,110 acres. The largest average acreage burned has been the month of August with an average of 4,062 acres, followed closely by the month of July with an average of 3,653 acres. Burned acreages for June and September average about 519 acres and 542 acres, respectively. The average fire size is approximately 221 acres for the fifteen-year period.

ECONOMICS

Introduction

The Cascade RMP area is a highly diverse area that encompasses all or parts of eight counties in southwestern Idaho. There are 29 incorporated cities in the area, with populations that range from under 25 to over 100,000. Total population in the eight-county area is estimated at 326,000 (Bureau of the Census 1985). Ada County accounts for 58% (189,300). Canyon County accounts for another 27% (87,800). Payette County, which is the next largest county, accounts for only 5%.

Earnings

Total earnings in the eight-county area in 1983 were \$2.3 billion (Bureau of Economic Analysis 1985). This consisted of \$2.2 billion in nonfarm earnings and \$0.1 billion in farm earnings. Earnings distributed by industry is shown below.

1983 Earnings by Rank

| <u>Industry</u> | <u>Earnings (000s)</u> | <u>Rank</u> |
|---------------------------------|------------------------|-------------|
| Services | \$422,316 | 1 |
| State and Local Government | 276,615 | 2 |
| Retail Trade | 262,219 | 3 |
| Durable Manufacturing | 253,971 | 4 |
| Construction | 219,045 | 5 |
| Finance, Insurance, Real Estate | 151,986 | 6 |
| Nondurable Manufacturing | 144,156 | 7 |
| Federal Government (Civilian) | 112,541 | 8 |
| Farm | 96,317 | 9 |
| Federal Government (Military) | 8,836 | 10 |
| Other 1/ | 388,751 | -- |

1/ Ag Services, Mining, Transportation and Public Utilities, Wholesale Trade

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis. 1985. Earnings by Industry 1978-1983, Regional Economics Information System, April 1985.

Within the eight-county area the services portion of the economy is the largest (in terms of earnings), followed by state and local government, retail trade, and durable manufacturing.

This level of 1983 nonfarm earnings represents a 28% increase since 1979. After adjusting for the effects of inflation (using the implicit GNP price deflator) this becomes a decline of 3% in real dollars. The 1983 farm earnings represent a 1% decline since 1979. This becomes a 25% decline after adjusting for inflation.

Employment

The data presented here is for wage and salary employment only. Data on proprietors (both farm and nonfarm) are not available.

Total wage and salary employment in the eight-county area in 1983 was 121,078 (Bureau of Economic Analysis 1985). This consisted of 3,450 farm jobs and 117,628 nonfarm jobs. Employment distribution by industry is shown below.

Employment By Rank

| <u>Industry</u> | <u>Wage & Salary Employment</u> | <u>Rank</u> |
|-----------------------------------|-------------------------------------|-------------|
| Services | 23,648 | 1 |
| Retail Trade | 21,246 | 2 |
| State and Local Government | 18,843 | 3 |
| Manufacturing | 17,236 | 4 |
| Wholesale Trade | 7,675 | 5 |
| Finance, Insurance, Real Estate | 7,533 | 6 |
| Transportation & Public Utilities | 7,530 | 7 |
| Construction | 6,039 | 8 |
| Federal, Civilian Government | 4,570 | 9 |
| Farm | 3,450 | 10 |
| Federal, Military Government | 1,545 | 11 |
| Other (Ag Services, Mining) | 2,123 | -- |
| Total | 121,078 | |

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis. 1985.
Full-Time and Part-Time Employees by Major Industry 1978-1983,
 Regional Economics Information System, April 1985.

Within the eight-county area the services portion of the economy is the largest (in terms of wage and salary employment), followed by retail trade, state and local government, and manufacturing.

The level of 1983 farm employment represents a 9% increase since 1979. The 1983 nonfarm employment level represents a 5% decline since 1979.

Multipliers

When changes occur in one sector of a local economy, changes also occur in other sectors. This is due to the interrelated nature of the economy. These changes are measured through the use of multipliers. The multiplier is a single number that summarizes the total direct and indirect spending effects of a given change in the local economy. The U.S. Water Resources Council published gross output multipliers for Bureau of Economic Analysis (BEA) economic areas in January of 1977. The economic area that includes the Cascade RMP area is Area 159. This includes all of southwest Idaho and parts of southeast Oregon. These multipliers (shown in Appendix N) indicate that the sectors in the local economy that would lead to the greatest changes in other sectors would be the meat animals and meat products sectors. In addition to multipliers, output must be converted to earnings

in order to estimate economic impact. This is done through the use of earnings to gross output ratios. These ratios have been calculated based on U.S. Water Resources Council procedures and are shown in Appendix O.

Crop Agriculture

In 1983, cash receipts from agricultural marketings in the RMP area totaled \$467.3 million. Of this total, \$179.4 million was from crop production (BEA 1985). Based on this, it is estimated that 38.4% of total farm income and employment results from crop production. This would mean that in 1983 crop agriculture earnings was \$37.0 million while employment was 1,325.

Livestock

In 1983 the cash receipts from marketing of meat animals (primarily cattle and calves, sheep and lambs) accounted for 45% of total farm cash receipts. This varied by county from a low of 34% in Gem County to a high of 89% in Valley County. Assuming that farm earnings are in the same proportion as cash receipts, total earnings from meat animals in the eight-county area would be 45% of total farm earnings, or \$43.3 million.

The 1982 Census of Agriculture indicated that there are approximately 84,823 beef cattle and calves and 22,726 sheep and lambs in the eight-county RMP area. This would be 89,368 animal units. This means that each animal unit generates earnings of \$485.

The permittees in the Cascade RMP area have a total herd size of 51,581 cattle and 5,650 sheep. This would be 52,711 animal units which would generate earnings of \$25.6 million. This would be 59% of the total eight-county meat animal earnings and 27% of total farm earnings.

Total current BLM AUMs in the eight-county area are 66,424. This would support 5,535 animal units which would generate earnings of \$2.7 million. This would be 11% of permittee earnings, 6% of eight-county area meat animal earnings, and 3% of total farm earnings.

It is also assumed that 45% of total farm employment in the RMP area is meat animal related (based on the relationship between receipts and earnings discussed above). This means that total meat animal employment would be 1,553 (wage and salary only). Employment is assumed to be in the same percentages as earnings for permittees and BLM-AUM related employment.

As early as 1925 it was recognized that the annual value of the federal grazing privilege was being capitalized into rancher property. "It is argued that long use of the range in connection with the early settlement of agricultural lands has resulted in capitalizing the values of public pasture as part of the value of the ranch..." (USDA 1925).

A report published by the Utah State University Experiment Station stated: "There was nothing illegal or unethical in the fact that grazing permits took on value; ranchers just reacted to an economic situation that was created by government policy. Permit values rose because ranchers who have grazing permits were capturing economic rents in the form of low-cost

grazing; i.e., the grazing fee and recognized non-fee costs did not equal the value of the grazing to ranches. Thus, the authorization to use the federal lands and the associated economic rents were capitalized into rancher-owned assets. This value could show up either as a permit value or as an increased value of the commensurate property." (Nielson and Workman 1971).

The Bureau of Land Management's position on permit values is based on very explicit language in Section 3 of the Taylor Grazing Act of 1934 which states: "So far as consistent with the purposes and provisions of this Act, grazing privileges recognized and acknowledged shall be adequately safeguarded, but the creation of a grazing district or the issuance of a permit pursuant to the provisions of this Act shall not create any right, title, interest, or state on or to the lands." Thus, any capitalized value associated with grazing permits has no legal basis and as a result a rancher has no compensation for loss of this value.

Magazine articles and research results have often been in conflict on the subject of permit values. Nevada rancher, Dean Rhoads, in an article in the New West Magazine stated that "the forage right for a single cow on the public range now sells for anywhere from \$1500 to \$3000 in the Elko area." (Boly 1980). A survey done in New Mexico of ranch appraisers and credit officers placed the value of Forest Service permits at between \$944 and \$1,163 per animal unit, depending on area, in New Mexico. Bureau of Land Management values varied from \$667 to \$888 (Fowler and Gray 1980). On the other hand, a study in eastern Oregon found "the inclusion of public grazing privileges were found to have no significant impact on the level of private grazing land sale prices." (Winter and Whittaker 1979).

Based on the active preference in the RMP area, it is estimated the capital value of BLM AUMs would be between \$4.1 and \$18.2 million.

Recreation

Expenditures in the recreational activities of the region primarily impact the retail trade and services sectors of the economy. The 1980 Survey of Hunting and Fishing (U.S. Fish and Wildlife Service 1980) data indicates that in destination-type expenditures (meals, lodging, transportation, ammunition, land use fees, etc.) the retail trade sector is affected the most. The direct impact of a dollar of recreation expenditure by type of activity is shown below.

Distribution of Recreation Expenditures

| Sector | Fishing | Big Game | Small Game | Migratory Birds | Other Hunting |
|----------------|---------|----------|------------|-----------------|---------------|
| Transportation | \$.01 | \$.02 | \$.00 | \$.00 | \$.00 |
| Retail Trade | .95 | .97 | .99 | .99 | .99 |
| Services | .04 | .01 | .01 | .01 | .01 |

A wide variety of recreational activities take place on public lands in the RMP area. The level of recreation use on public lands has been estimated at 622,000 activity occasions. Data in the 1980 National Survey of Hunting and Fishing for Idaho identifies expenditures for hunting and fishing by type of expenditure. Destination-type expenditures were \$9.43/day for fishing a \$12.24/day for hunting. Additionally, non-consumptive use of wildlife had destination-type expenditures of \$12.76/day. The average of these three, \$11.50/day, was used to estimate total expenditures. The definitions for an "activity occasion" and a "day" in the reports by the Idaho Department of Parks and Recreation and the U.S. Fish and Wildlife Service appear to be roughly the same. Thus, the values for expenditures per day have been directly applied to the number of activity occasions. Total expenditures would be \$7.2 million. This level of expenditures converts to earnings of \$2.8 million using the earnings to gross output ratio for the retail trade sector of the economy.

Employment estimates were developed by comparing the 1983 retail trade earning in the RMP area with the wage and salary retail trade employment. This estimates earnings per job at about \$12,000. This is somewhat inflated due to the lack of data on retail trade proprietors. The employment generated by the recreation activities on public lands in the RMP area would be 233 jobs.

Lumber and Wood Products

The Idaho Department of Employment estimated lumber wages and employment at \$90.8 million and 4,228 jobs (Idaho Department of Employment 1984). Two of the counties in the RMP area, Ada and Canyon, are not considered timber producing counties by the Idaho Forest Industry Council (I.F.I.C. 1984). These two counties account for 59% of employment and wages in the lumber industry. This is largely due to the location of the headquarters of Boise Cascade Corporation in Ada County (Boise). Excluding these two counties leaves employment and wages in the RMP area lumber industry of 1,738 jobs and \$37.3 million. In a study of the Idaho Forest Industry (Youngblood 1983) it was found that there are 10.48 man years per million board feet of lumber processed. This would mean that 166 million board feet of lumber would have been processed to maintain the 1983 employment level in the wood products industry in the RMP area (excluding Ada and Canyon Counties).

The 1983 lumber earnings would represent 23% (all eight counties) of the total manufacturing sector of the RMP area economy. Excluding Ada and Canyon Counties this would drop to 9%.

The current allowable cut in the Cascade RMP is 1.0 million board feet. This would generate roughly 10 jobs and earnings of \$215,000. This would be less than 1% of the 1983 lumber earnings for the RMP area (excluding Ada and Canyon Counties).

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter discusses the environmental consequences of selection and implementation of each of the alternatives described in Chapter 2. The discussion for each alternative identifies impacts on each resource component of the affected environment described in Chapter 3. All practical mitigation measures have been incorporated into the design and description of the alternatives. Therefore, impacts identified in this chapter are unavoidable and would occur if the alternatives were implemented.

A 20 year time frame has been used for the assessment of environmental consequences for the long term unless otherwise stated. The following elements of the environment were analyzed but are not addressed since no significant impacts were identified: climate, topography, flood plains, prime or unique farmlands, and social conditions.

ALTERNATIVE A

RANGELAND RESOURCES

Soils

Broad based erosion rates would show little significant change from the current average of 2.0 tons/acre/year. Increases of up to 0.20 tons/acre/year (10 percent) are estimated over the long-term (20 year period) under current management. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. Certain uses and actions could result in high amounts of erosion on specific areas with both short and long term effects. These areas would be a small percent of the RMP area and would not have a pronounced effect on the overall average rate.

One of the greatest impacts on soils would occur on limited and open ORV use areas. Areas most affected would be the Boise Front, Clay Peak and Little Gem cycle parks, Weiser Dunes, Pickles Butte, Parma, and Dewey play areas. Moderate to severe rill and gully erosion could be expected to occur.

Agricultural use on 1,040 acres of transferred public lands could cause localized but significant long-term increases in soil loss. Off-site soil movement on farmed areas is expected to be at least 10 times higher than on rangeland (SCS 1984). Removal of vegetative cover and surface disturbance would result in a significant increase in wind blown particulate matter which would decrease the air quality in communities in the vicinity of the development. An increase in off-site soil movement caused by water would be anticipated based on experience with previous agricultural developments.

Construction and use of 2 miles/year of roads over a 20 year period for timber harvest would be on the highly erosive granitic soils. This would result in a short-term (one to three year) significant increase in soil loss and sediment yield to streams. Megahan and Kidd (1972) found that temporary logging roads on high erosion hazard granitic slopes in Idaho greatly

accelerated on-site surface and mass erosion, causing downstream sediment yields to increase an average of over 45 times for a 6 year study period. Roads and skid trails are the major source of soil loss and sediment during and after timber harvest operations. Erosion and compaction would be minimized by ripping, water barring, reseeding, and closing roads and skid trails after harvest. If clearcutting is utilized, areas would be limited to 40 acres or less. Clearcutting would have the greatest adverse impact on soils because of the substantial decrease in groundcover which increases the potential for accelerated erosion. Selective cutting, where a substantial number of trees are left, can have the least impact on soils. Timber harvest would occur on 100-400 acres annually with an annual cut of 1 million board feet.

Broad based increases in soil erosion would be in part due to the continuing increase in poor range condition, particularly where perennial range species give way to annual species. See "Affected Environment" - Soil section for effects of composition and density on soil erosion. Areas which are highly subject to wildfires, principally the annual range areas, would show accelerated short-term (one to two year) erosion rates as fire removes vegetative cover and fire suppression activities disturb the soil surface. Long-term rates would return to prefire levels or better depending on rehabilitation efforts and success. The moderate to steeply sloping sedimentary and granitic soils of the Boise Front and Black Canyon area may pose serious erosion problems if wildfire removes vegetative cover. Erosion rates in excess of 5 tons/acre are likely.

Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually. This would reduce soil erosion attributed to wildfires.

Livestock utilization at current levels (66,014 AUMs) over a 20 year period would cause only slight increases (less than 0.2 tons/acre/year) on the broad based erosion level. Livestock grazing would result in continued loss of vegetative cover and soil productivity. Soil compaction would continue to be a problem, especially around water facilities, streambanks, reservoirs, and other livestock concentration areas. The continued grazing practice on steep (slopes greater than 30%) high erosion hazard areas have a high probability of increasing erosion rates in these areas. The 6 miles of proposed pipelines for range improvement would cause short-term (1 year) soil and vegetation disturbances. These would consist of compaction, mixing of soil layers, and removal of vegetative cover.

Right-of-ways (ROWs) would cause varying degrees of disturbance in the RMP area. No significant impact on soil is expected from construction of pipelines, powerlines and telephone lines after the construction is finished. Roads, especially unsurfaced roads, may cause both short and long-term erosion problems. The probability of this happening is very high.

Mineral development and production may cause locally substantial soil erosion depending on the size of the project. Access road construction and other surface disturbing activities would be the primary causes. Overall impacts on soils attributed to mineral activities is not expected to be significant since mineral activity projected over the next 20 years is expected to remain at about the current levels.

Fencing 14 miles and streambank planting of 18 miles of riparian habitat would improve vegetative cover and reduce soil compaction and trampling damage to streambanks. Runoff and soil movement would also be reduced.

Air Quality

There would be no long-term adverse effects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to burning of slash piles after timber harvest.

Lands transferred for agricultural production would result in an increase in wind blown particulate matter. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to the air for short periods.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly improve due to the proposed 14 stream miles of riparian exclosures and the inclusion of 73 stream miles in revised allotment management plans. High fecal coliform count and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams within revised AMPs.

A short-term increase in sedimentation would likely occur on a range of 4-16 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 4-16 miles as above from the proposed 40 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation in streams would likely increase in moderate amounts in areas of open ORV use in high erosion hazard areas. Accelerated sedimentation would be a long term impact in those streams with inadequate flushing flows. A slight increase in sedimentation would likely occur in streams in areas of limited and closed ORV use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly improve.

Vegetation

The overall rangeland condition would show a decline on 3 to 5% of the RMP area over the projected 20 year period. The decline may not always reflect a total drop in condition class (ie. fair to poor). Many areas would experience a slight decline in rangeland condition but not enough to change ratings. Approximate breakdown where decreases are projected are:

good decreased - 2% (700 acres), fair decreased - 3% (6,246 acres), poor decreased - 3% (6,150 acres). For current range condition by allotment see Appendix E and Map 3-2. Trend data are not available.

The greatest decline in condition is expected on the 208,205 acres of fair condition rangeland (45% of the RMP area). This would be primarily due to an increase in annual species (cheatgrass and medusahead wildrye) and a decrease in perennial species (dominantly bunchgrasses) and shrubs (most importantly antelope bitterbrush). Most areas of fair condition range are composed of perennial and annual grasses with or without a shrub/brush component. These are highly susceptible to wildfire, over grazing, and surface disturbing activities. By far wildfires pose the greatest threat. Post fire conditions on many areas favor the rapid increase of annual species and decrease of the less competitive perennial species. This would mainly affect the steep, rough and/or shallow soil areas that would not be reseeded due to limitations. Areas suitable for reseeding following wildfire would be seeded with a non native seed mixture. Depending on success and management of seedings these areas should return to fair or better range condition. Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Little substantial decline in range condition is projected within 20 years from maintaining current grazing levels. Good and excellent condition areas are more inaccessible and would not receive additional use because of long distances from water and rough or steep terrain. Fair condition areas would show the most decline. Selective grazing by livestock of the most palatable, less plentiful perennial species causes a decrease in their vigor and number allowing annuals to increase.

Off-road vehicle activity would adversely impact range condition on high use areas which tend to be small and scattered. Man caused wildfires and surface disturbance would be the major causes. Generally these areas are in poor condition. Off-road vehicle use in good range condition areas would disturb the soil and vegetation and allow annual species to become established. This would increase the fire danger in these areas.

Most of the 211,639 acres of poor condition range (45% of the RMP area) are dominated by annual grass species. The decline in these areas would be primarily due to selective grazing and/or wildfire removing any remaining native plant species and further invasion of annuals. Exceptions are those areas that are rehabilitated after wildfire by seedings. The post rehabilitation condition would be subject to the success of the seeding and species seeded. Many of these areas are expected to show little success and continue to be dominated by annuals.

The 61,000 acres designated as curlew habitat (Black Canyon area) will be managed to maintain the existing short vegetative cover. Rehabilitation efforts will be designed to meet management objectives.

The 4,200 acres of Columbian sharp-tailed grouse habitat would improve in condition due to special management. Over 70% of the fair and poor condition rangeland is expected to increase in class. Areas currently in good condition would improve but to the extent of becoming excellent is undetermined.

Candidate and Sensitive Plant Species

Designation and management of 2 research natural areas totaling 475 acres would provide protection and increased vigor of some candidate and sensitive plant populations and increase public awareness of these areas.

Limiting ORV use and conducting site specific right-of-way clearances on 2,285 acres should provide for the continued existence of candidate and sensitive plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

Due to the lack of restrictions on mineral development on 2,285 acres, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act of 1973 might keep these impacts below the level of significance to the species as a whole.

Riparian Habitat

The Resource Management Guidelines for the various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal in this alternative would not impact the base of 122 miles of surveyed drainages. One mile of unsurveyed perennial habitat would be transferred from public ownership.

Habitat quality would be maintained on 106 miles of the 122 miles surveyed while 11.0 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of condition quality due to increased stocking levels would occur on 5 miles of stream riparian habitat.

Revision of 7 existing AMPs would result in some improvement of riparian habitat on 5 miles of perennial streams by including livestock grazing strategies that promote the vigor of streamside woody vegetation, an important component of streambank stability. This management strategy would also benefit 66 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of 1 MMBF and the associated 40 miles of road construction would have minimum impact on riparian habitat along the 3-12 miles of potentially impacted perennial streams and 1-4 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossing where absolutely necessary).

ORV use in the limited ORV use areas would occur on 25% of the area and would have a slight impact on riparian vegetation within these areas. Drainages are often used as travel corridors for wildlife and humans. With

no restrictions on 75% of the area, riparian areas with this open use classification would likely be moderately impacted resulting in long term disturbance of vegetation and soils and short term disturbance of riparian associated wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

The surveyed aquatic/fisheries habitat base for this alternative is 81 miles of perennial stream. To maintain the high degree of habitat quality on 67 miles of surveyed streams Resource Management Guidelines were developed to minimize impacts. Improvement of degraded habitat to good condition would occur on 14 miles of surveyed streams due to proposed aquatic habitat improvement projects.

Revision of 7 existing AMPs would result in improvements of approximately 5 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation, an important component of streambank stability. This management would also benefit 68 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of 1 MMBF and the associated 40 miles of road construction would impact 3-12 miles of the 39 miles of perennial streams within the total harvest acreages. Also impacted would be 1-4 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A slight increase in stream sedimentation over the long term would result from road construction in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures would be considered on a case-by-case basis to further minimize sediment loads.

Restrictions imposed on ORV use on 25% of the area by limited and closed use designations would minimize soil disturbance and associated stream sedimentation. Open use class on 75% of the area would result in a moderate increase in sediment loads in those streams in high erosion hazard use areas.

Although mining activity can be very destructive to the riparian and aquatic community, future mining associated impacts would be minimized by following Resource Management Guidelines.

Redband trout populations would increase over the long term on segments of 6 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 14 miles of riparian habitat is eliminated. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to improve existing poor and fair

condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

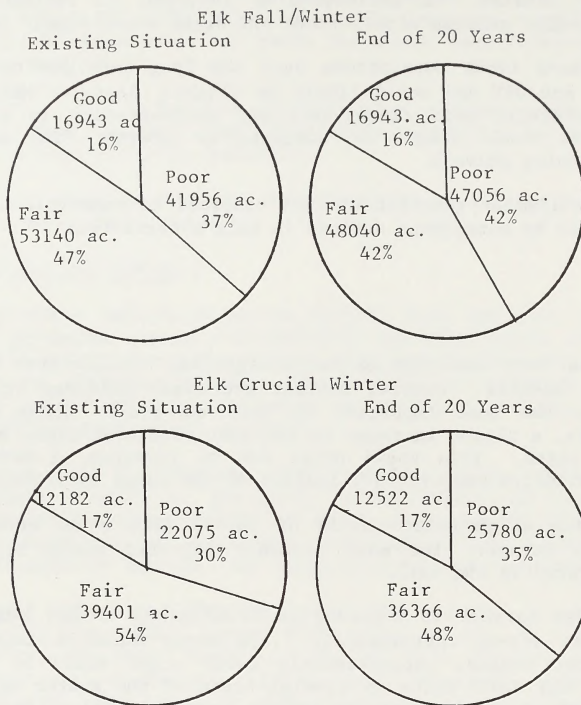
Elk habitat has been analyzed in two categories: fall/winter habitat and crucial winter habitat. Crucial habitat are areas utilized in severe conditions and are the most important to herd survival. Under current management practices, a slight increase in the poor condition class would be expected over 20 years. This would occur due to invasion of medusahead wildrye following wildfire and over-utilization of the range by livestock.

Livestock grazing at proposed levels of 66,655 AUMs would cause some loss of cover and forage. The most severely impacted would be winter habitat which is grazed in the fall.

Commercial timber harvest is proposed on 8,000 acres of BLM lands over 20 years. Of these acres, approximately 7,180 acres would be located on deer and elk winter ranges. Approximately 2,338 acres would be in elk fall/winter ranges and 3,657 acres in crucial areas of the winter range. A selective cut program would be used for timber harvest. Selective cutting could be beneficial to elk and deer habitat. Increased sunlight penetration in logged areas increases production of palatable forage. Elk use may be enhanced through selective cutting in certain forested habitat types. Minimal impacts are expected in elk crucial winter habitat areas because of selective cutting and other timber management practices.

Under current management habitat condition would slowly decline over 20 years. It is estimated that the habitat would only be able to support 1,093 elk which is a 5% decrease over present populations. This would not meet the population goal of a 20% increase over 20 years set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Mule Deer

As with elk habitat, the most important mule deer habitat has been analyzed in two categories: fall/winter habitat and crucial winter habitat. Under present management practices, an estimated 5% of the acres now in fair condition would be degraded to a poor condition class.

The present stocking levels of 66,655 AUMs would cause loss of forage and cover on mule deer winter ranges. With no change in grazing practices crucial ranges such as the Four-Mile Creek and Willow Creek drainage would continue to be in poor condition. The degradation of the habitat would mainly be caused by the invasion of medusahead wildrye in severely over-utilized areas and burned areas.

Riparian zones which are important habitat both in winter and summer would continue to be degraded in some areas by livestock use. The 30 miles of fencing and 28 miles of stream planting would improve fawning habitat in summer and thermal cover in winter.

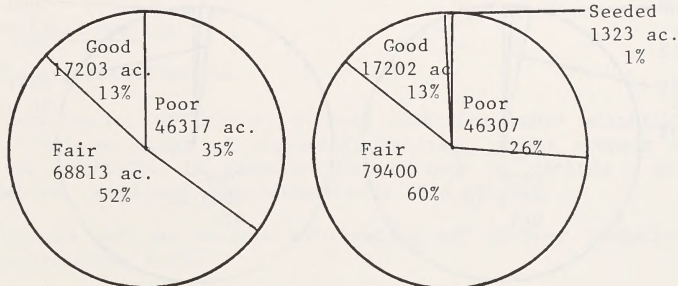
Approximately 7,180 acres of the proposed timber sale areas would be in elk and mule deer winter range. Approximately 108 acres would be in mule

deer fall/winter ranges and 1,091 would be in crucial areas where deer concentrate during severe weather conditions. In most cases, deer and elk crucial winter ranges overlap. Selective cutting and other forest management practices should minimize the impacts on mule deer winter habitat and crucial winter habitat. Mule deer use on an area may increase due to increased shrub growth in cut areas.

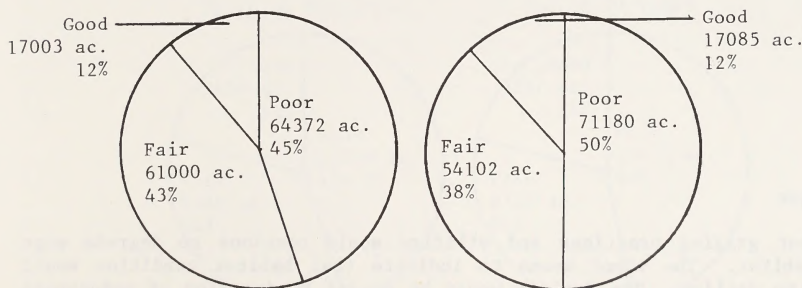
Under current management, habitat condition would slowly decline over the next 20 years. It is estimated that the habitat would only be able to support 6,584 mule deer which is a 5% decrease over present populations. This would not meet population goals of a 30% increase over 20 years set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Mule Deer Fall/Winter
Existing Situation End of 20 Years



Mule Deer Crucial Winter
Existing Situation End of 20 years

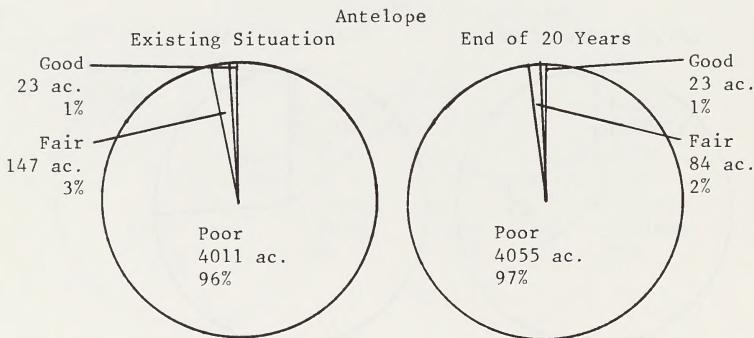


Antelope

Crucial antelope winter habitat lies between the Little Willow Creek and Big Willow Creek drainages. Currently, 96% of this winter range is in poor condition. Habitat condition under current management practices is expected to decrease slightly over the next 20 years. This can be attributed to livestock grazing and continued infestation of medusahead wildrye. Poor range condition and severe climatic conditions could severely inhibit population growth of this herd.

Current management would not meet the population goal of 150 animals set for the area by the Idaho Department of Fish and Game.

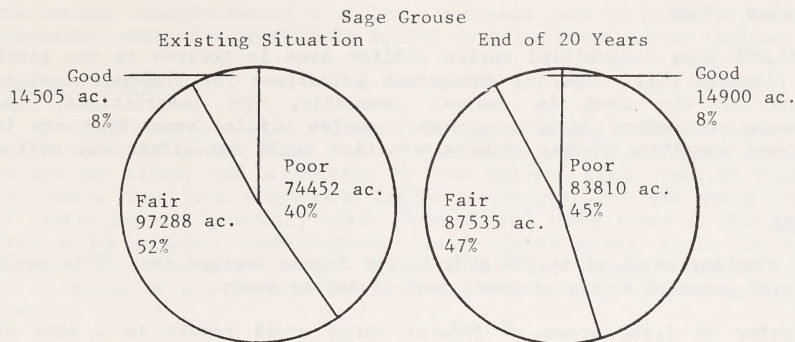
The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

Current grazing practices and wildfire would continue to degrade sage grouse habitat. The trend seems to indicate that habitat condition would continue to decline. The decline would be caused by invasion of medusahead wildrye and cheatgrass and loss of sagebrush cover.

The acreages and percentages of existing and projected 20-year habitat conditions are shown below.

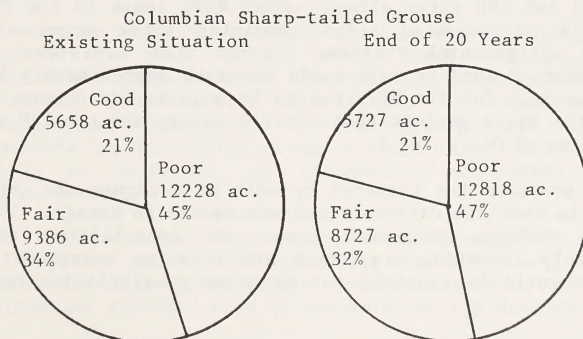


Sensitive Animal Species

Columbian Sharp-tailed Grouse

The continuation of current grazing practices would slightly increase the poor condition class of sharp-tail habitat. Under present management the habitat condition is expected to continue to decline. As loss of crucial habitat continues, populations will also decline.

The acreage and percentages of existing and 20-year projected habitat conditions are shown below.



Long-billed Curlew

A 61,000 acre long-billed curlew habitat area is located in the Black Canyon Planning Unit. Special management guidelines for the area include retention of the area in federal ownership, ORV restrictions, and maintenance of a short grass ecosystem. Curlew utilize areas that are in the poorest condition class. This alternative would not effect any curlew habitat.

Livestock

The stocking level of 66,424 AUMs is the 5-year average use. This would be adjusted downward as the proposed land transfers occur.

Transfer of 2,680 acres of federal range would result in a loss of approximately 248 AUMs (Appendix F). Three allotments would be adversely affected by sales, exchanges, and DLE's.

Special designation areas would further reduce livestock grazing on 915 acres of federal range with an additional 162 AUMs of forage lost.

Wild Horses

Wild horse herds will be maintained at current levels (Four Mile herd, ten horses/120 AUMs; West Crane herd, twelve horses/144 AUMs).

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 1,397 acres for sale or exchange, and 1,040 acres for Desert Land Entry for a total of 2,680 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately \$21,600 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that are difficult and uneconomic to manage. Their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase.

The average administrative cost for a trespass case is \$1,250, resulting in increased costs of approximately \$3,750 on an estimated three trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 4,333 acres of public land due to conflicts with significant cultural or recreation sites, and a portion of the Payette River Special Recreation Management Area (see respective Tables in Chapter 2). The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 14 miles of the Payette River within the Special Recreation Management Area.

Withdrawals

All lands presently withdrawn for livestock driveways (approximately 63,000 acres) would remain in that status or be continued if due to expire within the term of this plan. There is one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Pioneerville) would continue to be protected only by BLM standard operating procedures. The effects of vandalism, livestock trampling, erosion and other agents of deterioration would continue causing the loss of scientific information within a short time. Since no monitoring of these sites is performed, no information concerning the rate of deterioration is available.

Additional inventory needed to determine the boundaries of these sites for National Register nomination would not be performed, and presently unknown cultural resource sites within these areas would not receive the additional protection afforded them by inclusion on the National Register.

Paleontologic Resources

The Cascade Resource Area paleontologic inventory is not complete. A review of the data presently available indicates that, once the inventory is

completed and site clearances become standard practice, the required protection of the resource would be sufficient to keep the impacts minimal. No direct negative impacts to the resource are presently known. The greatest impact would be the possible loss of paleontologic resources on 2,680 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown paleontologic resources could be lost, destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

Based on the State Comprehensive Outdoor Recreation Plan (1983) data, the overall demand for recreation opportunities in the Cascade Resource Area is expected to increase 54-78% by the year 2000. This would result in demand increasing from the current 622,000 activity occasions to approximately 1,034,000 activity occasions. These increases are expected to occur primarily due to increased population and leisure time and should occur regardless of the alternative chosen in the RMP process. The location and relative mix of recreational activities would vary somewhat between alternatives, but overall demand throughout the CRA would be unaffected by any of the alternatives.

There would be 363,142 acres open to ORV use, 123,739 acres limited and 585 acres closed. Included are 2,000 acres which would be limited and 680 acres that would be open until the lands are transferred. The limited use areas would consist of the following acreages: Boise Front SRMA (11,995), Idaho City mines (40), Oxbow-Brownlee SRMA (39,787), Payette River Corridor (2,600), boat launches (12), Black Canyon Planning Unit (65,000 - includes long billed curlew habitat area), identified cultural sites (2,020), and candidate and sensitive plant sites or RNAs (2,285 - includes 900 acres within Little Gem Cycle Park). The 585 acres closed to ORVs would be developed recreation sites, the Silica Sands mineral site, the Halls Gulch Nature Trail, and the Clay Peak Cycle Park buffer zone.

ORV use on the Boise Front SRMA is currently limited to designated roads and trails. Rehabilitation of the approximately 10 miles of closed roads and trails on the Boise Front might decrease unauthorized ORV use by as much as 15-20% (BLM lands only), with proportionate increases in the visual and aesthetic qualities and watershed integrity. An annual seasonal closure of approximately four miles of roads and trails for Boise Front winter deer habitat currently in effect would continue with minimal impact on recreational ORV use.

Impacts on ORV recreation by limiting use in the Oxbow-Brownlee SRMA, Payette River Corridor, cultural sites and candidate and sensitive plant sites would be minimal since little use off trails and roads in these areas is occurring now or is expected to occur in the near future (snowmobiles excepted).

Limitations on 61,000 acres of public land in the Curlew Management Area (part of the 65,000 acre Black Canyon Planning Unit) currently in effect would continue with minimal impact on recreational ORV use.

Minerals related surface occupancy in developed and intensively used recreation areas could adversely impact recreation use on 3,785 acres. Surface occupancy could reduce the quality and quantity of vehicle use opportunities on 3,740 acres provided for in 5 intensive ORV use areas. This impact would be slight to moderate depending on the degree of development and surface occupancy. Recreation opportunities on 45 acres of campgrounds, boat launches, and the Halls Gulch Nature Trail would be substantially reduced in quality or even eliminated by surface occupancy.

A projected increase in big game numbers through improved habitat is expected to increase big game hunting opportunity. Opportunities for non-consumptive uses would also increase.

Granting the Pickles Butte DLE could decrease upland bird hunting opportunities by as much as 40% on the 1,440 acres of public lands in that area.

Construction of 40 miles of timber harvest access roads (2 miles annually for 20 years) would increase recreational access into these areas on those roads that would remain open for timber management purposes.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor uses.

Visual

More intensive management of the Boise Front SRMA (12,000 acres) could enhance the quality of the visual resource of the area by as much as 10-15%.

Improved riparian habitat on 82 miles of streams would improve the visual resource.

Harvesting 1 MMBF of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvest would be minimal.

Transferring 2,680 acres of land from federal ownership could result in impacts on the visual resource. See discussion in Alternative B.

MINERAL RESOURCES

Leasables

Oil and Gas

Approximately 100,000 acres of BLM land within this resource area have been classified as prospectively valuable for oil and gas. Considering a 12 month availability 1,200,000 acre/months of access exist. About 19,000 acres would continue to be affected by crucial deer winter range stipulations (closed 12/1 to 4/30) and 5,000 acres would continue to be closed from 2/15 to 6/30 to protect bird nesting and breeding areas. This

would be a total protective closure of 117,500 acre months or approximately 10% of the available access. Since weather and soil conditions normally do not allow off-road activities before 4/15 each year the impact from the stipulations would not be significant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of continued oil or gas leasing and development would be insignificant.

Geothermal

Approximately 94% of the resource area would remain open for leasing under this alternative. The areas closed to geothermal leasing would be the existing 31,177 acres of withdrawn lands. Impacts from time stipulations would not be significant because the periods of closure generally match the period that has poor weather and soil conditions which limit access.

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining would be the existing withdrawals of 31,177 acres.

A total of 2,680 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral Materials

Mineral material needs within the resource area have not been very high except in the Weiser area. No increase in need or decrease in overall

availability would result from the actions under this alternative. Some existing pits will, however, be depleted within the timespan of this plan.

The impacts from this alternative on mineral material resources would be insignificant.

FOREST RESOURCES

Timber

There are a total of 31,895 acres of commercial forest land. Approximately 16% or 5,139 acres have been determined through the Timber Production Capability Classification (TPCC) to be incapable of sustained long-term timber production. Included in those acres are lands that are classified as fragile or lands which cannot be reforested adequately. Seventy acres would continue to be used for a seed orchard. This leaves 26,686 acres of suitable commercial forest land, which is capable of sustaining long-term timber production, to be used for timber management and harvest. These 26,686 acres would be selectively cut, over an area of 100-400 acres to yield one million board feet (1 MMBF) of timber annually. This would require construction of 2 miles of roads per year to achieve the annual cut. Roads not needed for timber management would be closed following harvest.

The timber yield over the next 20 years would be 20 MM Bdft.

FIRE MANAGEMENT

Fire occurrence of 40 wildfires per year with a size of about 221 acres each for a total of 8,814 acres per year would be about average for this alternative. The total cost for full suppression in the resource area would be approximately \$109,300 per year. There would be a gradual reduction in the annual acreages of wildfires burned, because of the effects of fuel breaks, and because of rehabilitation and greenstripping effects, including reseeding of fire resistant species, which would retard or reduce the larger fires. Refer to Resource Management Guidelines for Fire.

ECONOMICS

Crop Agriculture

With this alternative there would be 1,020 acres of agricultural development. Based on past experiences, it is assumed that this development would occur in a gradual manner over 10 years. The BLM's Agricultural Development Economic Computer model was used to estimate sales from crop production with this alternative. A crop rotation of Alfalfa establishment - 1%, Alfalfa - 5%, Barley - 17%, Winter Wheat - 17%, Potatoes - 22%, Sugar Beets - 17%, and Dry Edible Beans - 21% was used in this analysis. This resulted in an average per acre sales of \$969 (see the appendix for a complete description of the process used to arrive at this amount). This means that the total sales from 1,020 acres would be \$988,400.

Utilizing the earnings to gross output ratio for crops, this level of annual sales would generate direct earnings of \$378,600. This would

represent 0.4% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be \$965,000. This would be 0.04% of the total RMP area 1983 earnings. See the appendix for a description of how these calculations were made.

Employment gains were estimated by comparing the 1983 farm earnings with the 1983 wage and salary employment to arrive at a earnings per job figure. The earnings per job in the farm sector of the economy would be \$28,000. This is inflated to some degree due to the lack of data on the number of farm proprietors. The direct earnings would lead to a gain in farm employment of 14 jobs. This would be 0.4% of the 1983 farm wage and salary employment. The total (all industries) earnings per job figure is \$19,000. Again, this is somewhat inflated due to the non-inclusion of data on proprietors. The total earnings gain would lead to an increase of 45 jobs. This would be 0.04% of the RMP area 1983 wage and salary employment.

Livestock

The 5-year and 20-year livestock forage level would be 66,014 AUMs. This would support 5,501 animal units which would generate earnings of \$2.7 million. This would be 11% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$7.2 million. This would be 0.3% of total RMP area 1983 earnings.

Based on farm earnings per job of \$28,000 the direct earnings would generate 96 jobs. This would be 2.8% of the 1983 farm wage and salary employment. The total earnings would generated 333 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This stocking level represents a capital value of between \$3.7 and \$16.5 million.

Recreation

The current level of recreation use (622,000 activity occasions) leads to expenditures of \$7.2 million. Utilizing the earnings to gross output ratio for retail trade this would convert to earnings of \$2.8 million. This would be 1.1% of the RMP area 1983 retail trade earnings. By the year 2000 the number of activity occasions would be up to 1,034,000 generating expenditures of \$11.9 million. This would be earnings of \$4.7 million or 1.8% of retail trade earnings.

Initially total earnings (including the multiplier effect) would be \$6.4 million or 0.3% of the total RMP area 1983 earnings. By the year 2000 total earnings would be \$10.6 million. This would be 0.5% of the total RMP area 1983 earnings.

Employment gains were estimated by comparing the 1983 retail trade earnings with the 1983 retail trade wage and salary employment to arrive at a earnings per job figure. The earnings per job in the retail trade sector of the local economy would be \$12,000. This is inflated to some degree due to the lack of data on the number of retail trade proprietors. Initially

the direct employment resulting from recreation activity would be 235 jobs. This would be 1.1% of the 1983 retail trade wage and salary employment. By the year 2000 the direct employment would be 392 jobs or 1.8% of the 1983 retail trade wage and salary employment.

Initially, the total employment (including the multiplier effect) would be 425 jobs or 0.4% of the RMP area, total wage and salary employment. By the year 2000 total recreation-related employment would be 884 jobs. This would be 0.7% of the 1983 wage and salary employment in the RMP area.

Lumber and Wood Products

Approximately 1.0 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of \$215,000. This would be 0.08% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be \$515,000. This would be 0.02% of the total RMP 1983 earnings.

The harvest level would lead to 10 jobs (Youngblood 1983). This would be 0.06% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 26. This would be 0.02% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately \$442,000.

Summary

This alternative would have little impact on the local economy. Total crop agriculture earnings and employment would increase by \$965,100 and 45 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Earnings and employment in the livestock industry would be unchanged from the existing situation. The capital value of AUMs would be reduced by \$0.4 to \$1.5 million. There would be no change in the recreation-related earnings and employment. There would be no change from the existing situation in lumber and wood products earnings and employment. Project costs needed to implement this alternative would be \$442,000.

ALTERNATIVE B

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average increase of 0.1 tons/acre/year (5%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be the same as Alternative A.

Commercial timber harvest is proposed on 150-700 acres annually with allowable annual cuts of 1.7 million board feet. Selective cutting would generally be used with clearcutting as an option. To accomplish this harvest 3.4 miles/ year of roads, over a 20 year period, would be built. Resulting impacts would be the same as described in Alternative A and Affected Environment.

The transfer of public lands include 1,486 acres for agricultural development. The impacts associated with farming are the same as described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 456,281 acres for locatables and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 23% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative B for details of improvements. Where range condition is improved through enhancement of vegetative density and/or composition, erosion rates would be reduced. Rates would decrease from 0.1 to as much as 1 ton/acre/year. The amount would depend on the degree of vegetative improvement, the success, and the following management of the area. Where annual range is converted to seedings the susceptibility to wildfires would be greatly reduced.

Where burning, spraying, disking or any combination of the three are used, with or without seeding, a short-term (one to two year) increase in soil loss would result. This would be due to loss of vegetative cover and surface disturbance. But as vegetation becomes reestablished and density and/or composition improved, long-term erosional decreases would be expected. Twelve miles of pipelines are proposed.

Livestock AUM increases of 7% are proposed over a 20 year period. By incorporating grazing systems and with the proposed range improvement

projects this increase would result in a very slight increase in erosion rates (up to 0.05 tons/acre/year) on grazed lands. Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 10 miles and streambank planting of 6 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

There would be no long-term adverse affects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to prescribed burning for rangeland improvements and slash burning after timber harvest.

Where spraying of herbicides is used to control brush and/or annual grasses a one to two hour reduction in air quality would result.

Lands transferred for agricultural production would result in an increase in wind blown particulate matter. Associated with crop production is the use of pesticides and fertilizers which would add pollutants to the air for short periods.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly increase due to a decrease in habitat quality on 2 miles of streams. Water quality would be maintained or very slightly improved on 25 miles of perennial stream and 153 miles of intermittent streams due to management in revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 7-29 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 7-29 miles as above from the proposed 68 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sediment in streams would likely increase moderately in 70% of the area due to the open ORV use classification in high erosion hazard areas. Accelerated sedimentation would be a long term impact in those streams with inadequate flushing flows. A slight increase in sedimentation would likely occur in streams in areas with limited and closed ORV classification.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly decline.

Vegetation

The long-term vegetative condition would show an overall improvement on 18 to 23% of the RMP area. This increase would not always reflect a total change in condition class. In many areas the general condition would improve but not enough to change classes. On approximately 14% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 25% (45,000 acres), fair improved - 28% (55,400 acres), good improved - 8% (2,700 acres). Trend data is not available.

The encroachment of annual grasses (medusahead wildrye and cheatgrass) into fair and poor condition rangeland would continue. This would be most prominent on the sedimentary and lower elevation basalt soils. These areas tend to be very susceptible to invasion once disturbed (wildfires or heavy use by livestock). Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Increasing livestock AUMs by 7% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. These increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches.

Rangeland and wildlife improvements would affect 10% of the RMP area. These and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

Impacts associated with ORV use would be the same as described in Alternative A.

The curlew habitat area and Columbian sharp-tailed grouse habitat area would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 6 research natural areas totaling 1,215 acres would provide protection and increased vigor for several candidate and sensitive plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be increased in these areas.

Limiting ORV use and excluding surface and subsurface rights-of-way on 2,285 acres should provide for the continued existence of candidate and sensitive plant species. Some species may increase in number due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers

outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wild fires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

Due to the lack of restrictions on mineral development on 2,285 acres, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act of 1973 would keep these impacts below the level of significant to the species as whole.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. Two miles of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 101 miles of the 122 miles surveyed while 9 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of condition quality due to increased stocking levels would occur on 12 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in some improvement of riparian habitat on approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 151 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of 1.7 MMBF and the associated 68 miles of road construction would have a minimum impact on riparian habitat along 5-22 miles of the potentially impacted 39 miles of perennial streams and 2-7 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV use in the limited areas would occur on 30% of the area and would have a slight impact on riparian vegetation within those areas. Drainages are often used as travel corridors by wildlife and humans. With no use restrictions on 70% of the area, riparian areas within these open use areas would likely be moderately impacted resulting in long term disturbance to vegetation and soils and short term disturbance to riparian associated wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Due to land transfer proposals in this alternative, 2 perennial stream miles would be eliminated from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 58 miles of the remaining 56 miles.

Improvement of habitat condition to good would occur on 10 miles of surveyed miles due to proposed aquatic habitat improvement projects. The remaining 12 miles would show a loss of habitat condition to the next lower condition class due to increased stocking rates.

Revision of 7 existing AMPs and the proposed 18 new AMPs would result in the improvement of approximately 25 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 153 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of 1.7 MMBF and the associated 68 miles of road construction would impact 5-22 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-7 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A moderate increase in stream sedimentation over the long term would result from road construction, particularly in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closure considered on a case-by-case basis to further minimize impacts.

ORV use on high erosional hazard areas would be in the limited use class on 28% of the area to minimize soil loss to drainages. The remaining 72% of the area would be in the open use class. A moderate amount of sediment could be expected to reach perennial streams with these levels of use.

Redband trout populations would increase over the long term on segments of 3 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 9 miles of riparian habitat is eliminated. Decreased habitat condition on 12 stream miles due to increased stocking levels would cause a slight decrease in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be moderate. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Both fall/winter ranges and crucial winter ranges would show a slight improvement in this alternative. This improvement would be located mostly in the northern portions of the ranges in the higher precipitation zones.

In crucial winter ranges, there are 10,000 acres of range and wildlife seeding proposed. Approximately 1,100 acres of range program seedings are proposed in elk fall/winter ranges. There are also about 2,800 acres of aerial seedings that are proposed for the Snake River Breaks. These seedings would improve the carrying capacity of the range for both wildlife and livestock.

There are 2,293 acres of timber sales proposed in the fall/winter ranges. Impacts from these sales should be minimized by following the Resource Management Guidelines.

In crucial winter ranges, 8,190 acres of timber sales are proposed. There are also 68 miles of roads proposed in deer and elk habitat to facilitate these sales. Negative impacts could occur from decreasing crucial habitat. Roads would make more areas accessible to the public during hunting season and put more pressure on the population.

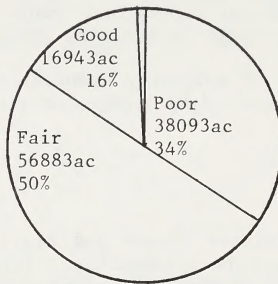
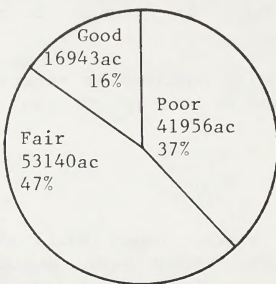
There are 4,660 acres of crucial habitat proposed to be offered for sale or exchange. This would have slightly negative impacts by decreasing habitat availability by 6%.

The 7% increase in livestock AUMs over the 20 year period would have minimal impact on elk populations and its habitat.

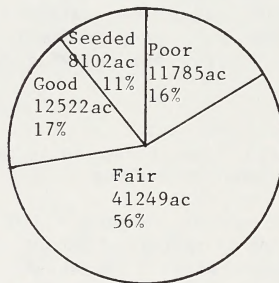
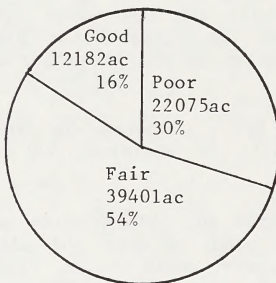
Overall, there would be increased range and wildlife seedings beneficial to elk, improved livestock management, and 18 new AMPs. These factors combined with the current situation of over 65% of the area in fair to good condition, would provide habitat which should be able to support a 25% increase over current populations. This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Elk Fall/Winter
Existing Situation End of 20 Years



Elk Crucial Winter
Existing Situation End of 20 Years



Mule Deer

Fall/winter and crucial winter deer ranges should show a slight improvement over current situation. This improvement would occur in the higher rainfall, northern ranges. This improvement would be due mainly to increased livestock management and use of grazing systems.

There are 2,400 acres of range projects proposed in the fall/winter ranges and approximately 20,000 acres of both range and wildlife seedings proposed in the crucial winter range. These seedings are designed to improve the forage base and increase the carrying capacity of the range. The 2,800 acres of aerial seedings proposed for the Snake River Breaks would improve the forage base on these crucial ranges.

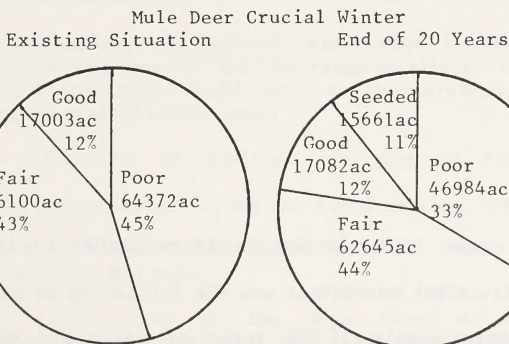
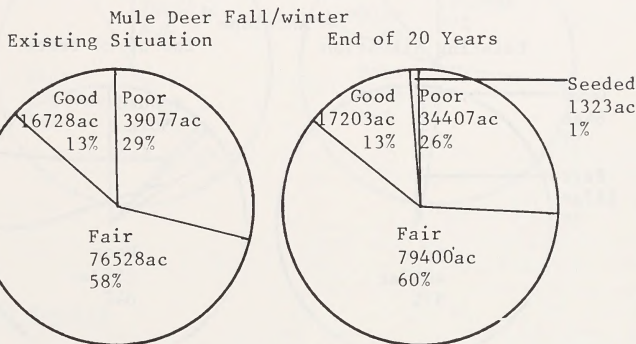
There are approximately 665 acres of timber sales proposed in the fall/winter ranges and 1,092 acres on the crucial winter ranges. Impacts should be minimized by following Resource Management Guidelines. Negative impacts on local populations could occur by decreasing the available crucial habitat. The roads would open more areas and increase hunting pressure on local populations.

The proposed transfer through sale or exchange of 6,690 acres in crucial winter ranges would have negative impacts on local populations. This would decrease the available habitat over the resource area by 5%.

The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. Habitat improvement projects would help increase the carrying capacity of this crucial habitat.

Because of the increased use of grazing systems, improved livestock management and increased carrying capacity of the ranges due to seedings, the habitat is predicted to be able to support at 25% increase over current populations. This would not meet the goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

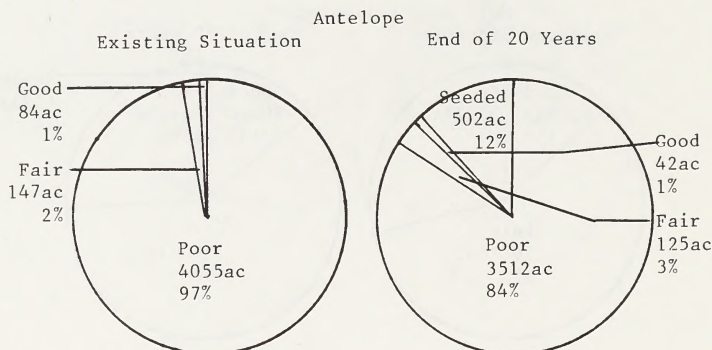


Antelope

Crucial antelope winter ranges (4,400 acres) would not show any improvement in this alternative. Approximately 10% of this crucial habitat is proposed for sale or exchange. Negative impacts could occur due to this loss of habitat. Approximately 13% of the range would be seeded, which would improve the forage base of the local range. The remaining range would not be seeded due to reinfestation of medusahead wildrye. Seedings will emphasize shrub species to improve winter forage for the population.

Current population of the resource area is 50 animals. After improvements and livestock management, the habitat should support a population of 100 animals. This would not meet population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

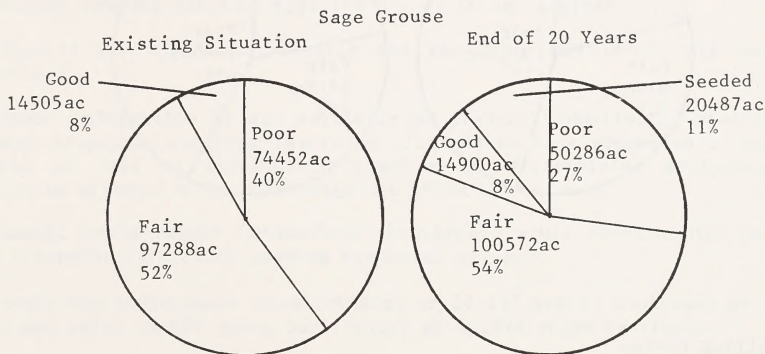
The habitat under this alternative is predicted to improve slightly. This would be due to livestock management and the initiation of grazing systems.

There are approximately 27,000 acres of range and wildlife seedings proposed. These seedings which would constitute 15% of the sage grouse habitat would improve nesting and brood-rearing habitat. Approximately 9,000 acres are in the crucial zone or 2 miles from a strutting ground. Disturbance of the area may have negative impacts to the breeding area.

There are 3,900 acres that are proposed to be offered for sale or exchange. Negative impacts could occur if these lands are within the 2 mile crucial zone of a strutting ground.

Seedlings which do not include sagebrush would have little value to sage grouse. It would, however, relieve the pressure on local native ranges important to sage grouse.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sensitive Animal Species

Columbian Sharp-tailed Grouse

Under this alternative, the habitat would show a slight improvement. This would be due to improvement in the range condition due to livestock management. These improvements would occur in the northern portions of the habitat in the higher precipitation zone.

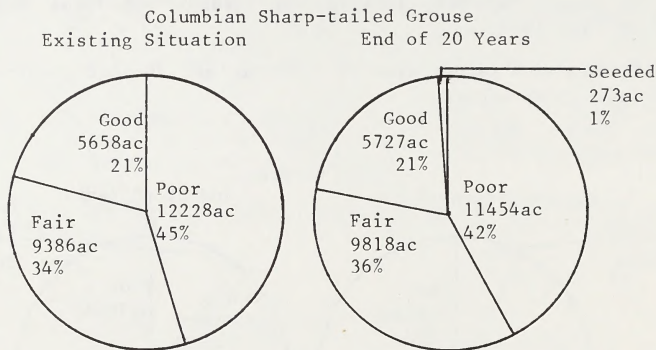
Approximately 250 acres of seedlings are proposed for this habitat. Native seed mixtures would improve the nesting and brood-rearing cover of the area.

The proposed land transfer of 520 acres would have negative impacts if a local population is using the area.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed grouse habitat and should stimulate population growth.

Environmental Consequences

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Long-billed Curlew

The proposed seedings for both range and wildlife would have negative impacts on all curlew habitat. Most species of grasses grow too high for the area to be used as nesting habitat.

Approximately 3,750 acres of curlew habitat is proposed for sale or exchange. These areas would have to be reviewed on a case-by-case basis format to assess impacts to the habitat.

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an ACEC. The proposed management of the area would protect the habitat for nesting curlews.

Livestock

Under this alternative livestock forage levels would decrease by 6,216 AUMs due to land transfers. In the short term (5 years) with 6,000 acres seeded producing approximately 2,000 AUMs of forage, the resulting available livestock forage (with above mentioned losses) would be 61,872 AUMs. This would be a 7% decrease from the present five year average license use of 66,424 AUMs.

Over the long term (20 years) additional seedings of 17,000 acres would produce 5,700 AUMs. New water developments, fencing and increased livestock management on approximately 55,000 acres of native range would increase forage production an additional 2,869 AUMs.

Total forage production would reach 71,076 AUMs. This would be a 7% increase from the present five year average license use.

The largest single impact to the livestock program would be from land transfer out of federal ownership. In this alternative 38,548 allotted acres would be transferred by sale, exchange or desert land entry.

Special designation, historic and cultural areas of 915 acres would remove an additional 162 AUMs from current, available forage.

In both the short and long term analysis of range improvements and land treatment, AUMs lost to transfers and other special designation areas were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition where needed.

Annual grass ranges (medusahead/cheatgrass) would receive high priority land treatment efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres and added on 627 acres for a total of 41,390 acres available.

Wild Horses

Under this alternative the West Crane wild horse herd would be removed.

The Four-Mile wild horse herd would be maintained at 10-25 head. Livestock voluntary non-use of 424 AUMs for maintenance of range condition which has occurred since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 563 acres for sale, 33,409 acres for sale or exchange, 5,957 acres for exchange, and 1,486 acres for Desert Land Entry for a total of 41,415 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, 320 acres for a sanitary landfill site for Canyon County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately \$38,000 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value for the 320 acre parcel to Canyon County, the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that are difficult and uneconomic to manage. Their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 497 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase. The average administrative cost for a trespass case is \$1,250, resulting in increased costs of approximately \$5,000 on an estimated four trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 6,627 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from the withdrawals, 40,763 acres would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing

Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Mill Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 41,415 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 340,442 acres open to ORV use, 143,439 acres limited and 585 acres closed.

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

An additional designation of 22,700 acres would seasonally limit ORV use to existing roads and trails in the Columbian sharp-tailed grouse habitat area. The impacts of this restriction would not be significant due to the current and projected low use in this area.

A projected increase of 25% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A. The Canyon County Sanitary Landfill Site (T1) would transfer 320 acres from the ORV play area. ORV use would most likely continue on the Canyon County landfill area (320 acres) but not on the DLE transfer.

Lands available for dispersed recreation would be reduced by the 41,404 acres identified for disposal.

Construction of 68 miles of timber harvest access roads (3.4 miles annually) would increase recreational access potential to a greater extent than Alternative A on roads which remain open after harvests are completed.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River will be proposed for National Wild and Scenic Rivers study. This includes 1,240 acres of commercial forest lands in the corridor.

Visual

The positive effects of intensively managing the Boise Front as an ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 176 miles of rivers and streams would improve the visual resource in these locations.

Harvesting 1.7 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber activities would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Pipelines could be constructed using a ripper to bury the pipe, thus minimizing the adverse impacts. Other range developments such as fences and reservoirs should not significantly impact scenic quality because the standard operating procedure for construction would mitigate potential impacts. Land treatments that are designed with feathered edges, multiple species seed mixtures and other mitigating measures should not cause significant adverse impacts.

Transferring 41,404 acres of land from public ownership could result in impacts on the visual resource. Acres transferred from federal ownership by sale or exchange, would no longer be under BLM control and visual quality would depend upon the management implemented by the new owner. Example: agricultural development would transform the areas' scenic views from one of

sagebrush/grass dominance to one dominated by cropland and farming. The visual quality of transferred land that is maintained primarily for grazing purposes would not change significantly from present conditions.

MINERAL RESOURCES

Leasables

Oil and Gas

This alternative proposes a 2,600 acre withdrawal for a section of the Payette River. The area involved is covered by existing power site and Bureau of Reclamation withdrawals and is not classified as prospectively valuable for oil and gas. This overlapping withdrawal is therefore considered to have no impact on the availability of lands for oil and gas exploration or development under this alternative.

The no surface occupancy stipulations under this alternative total 886 acres. The lands involved are generally small and outside of the lands identified as prospectively valuable for oil and gas. The 500 acre Pickles Butte area no Surface Occupancy restriction may be a significant adverse impact on oil and gas exploration and development in the area.

Time stipulations for the protection of wildlife are consistent throughout this plan and would be insignificant. See Alternative A for the analysis of their impacts.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

This alternative proposes a 2,600 acre withdrawal for a section of the Payette River. The area involved is covered by existing power site and Bureau of Reclamation withdrawals. It is classified as prospectively valuable for geothermal resources and has a hot spring producing 176° F water. As this proposed overlapping withdrawal does not add to the total acreage withdrawn, approximately 94% of the resource area would remain open for leasing under this alternative. No other new withdrawals are proposed. The impacts would therefore not be significant.

The no surface occupancy stipulations under this alternative total 886 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area.

Time stipulations for the protection of wildlife are consistent throughout this plan and would not be significant. See Alternative A for the analysis of their impacts.

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be considered insignificant.

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be considered insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining are the existing withdrawals. A new withdrawal of 2,600 acres along the Payette River overlaps existing withdrawals. This overlapping withdrawal would not have any significant impact on the availability of lands for locatable mineral location and development. An 8 acre withdrawal to protect the Placerville historic site would not be a significant impact.

Although 41,415 acres of land are proposed for transfer from federal ownership, no lands having valid claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development is therefore considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral material needs are not expected to increase or decrease as a result of proposed actions under this alternative. Some existing sites would, however, be depleted within the timespan of this plan and new sites would be needed.

The 12,000 acre Boise Front ACEC would be closed to the sale or free use of mineral materials under the alternative. Road construction and other mineral materials would not be available for use in right-of-way construction and maintenance, road construction and maintenance, mining construction and maintenance, or any other use within or out of the area. This would be a significant impact on the availability of mineral materials from federal lands, particularly if an emergency situation requiring the use of these materials arises.

FOREST RESOURCES

Timber

The total acres of commercial forest land would be reduced by 1,044 CFL set aside acres.

The impacts of losing this 1,044 acres of commercial forest land would be minimal. The annual allowable cut would increase to 1.7 million board feet.

FIRE MANAGEMENT

Agricultural developments, or transfer acreages, about 8-10% of the total acreages, would gradually increase the number of fires and the cost of fire suppression. Fire suppression costs would increase to approximately \$115,000 per year, or 5% of the total costs per year. All other levels would remain the same as with Alternative A.

ECONOMICS

Crop Agriculture

With this alternative there would be 1,486 acres of agricultural development. The total sales would be \$1,439,900.

This level of annual sales would generate direct earnings of \$551,500. This would represent 0.6% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be \$1,405,800. This would be 0.06% of the total RMP area 1983 earnings.

The direct earnings would lead to a gain in farm employment of 20 jobs. This would be 0.6% of the 1983 farm wage and salary employment. The total earnings gain would lead to an increase of 65 jobs. This would be 0.06% of the RMP area 1983 wage and salary employment.

Livestock

The 5-year livestock forage level would be 61,857 AUMs. This would support 5,155 animal units which would generate earnings of \$2.5 million. This would be 10% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$6.7 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 89 jobs. This would be 2.6% of the 1983 farm wage and salary employment. The total earnings would generate 308 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between \$3.4 and \$15.5 million.

The 20-year livestock forage level would be 71,076 AUMs. This would support 5,923 animal units which would generate earnings of \$2.9 million. This would be 11% of total permittee earnings, 7% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$7.6 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 103 jobs. This would be 3% of the 1983 farm wage and salary employment. The total earnings would generate 354 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between \$4.0 and \$17.8 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 1.7 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of \$387,000. This would be 0.2% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be \$926,900. This would be 0.04% of the total RMP 1983 earnings.

The harvest level would lead to 18 jobs (Youngblood 1983). This would be 0.1% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 46. This would be 0.04% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately \$1.9 million.

Summary

Total crop agriculture earnings and employment would increase by \$1,405,800 and 65 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$6.7 million and 308 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$7.6 million and employment of 354 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$926,900 and 46 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.9 million.

ALTERNATIVE C

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average decrease of 0.4 tons/acre/year (20%) from current levels. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, range projects, and mineral exploration and/or development.

Impacts from ORV use would be the same as Alternative A. Closed ORV areas have a high probability of gaining long-term benefits to watershed and site productivity on an additional 1,765 acres.

Commercial timber harvest is proposed on 50-200 acres annually with allowable annual cuts of 0.5 million board feet. Selective cutting would generally be used with clearcutting as an option. To accomplish this harvest 1 mile/ year of roads, over a 20 year period, would be built. Resulting impacts would be the same as described in Alternative A and Affected Environment.

Under this alternative no lands would be disposed of for agricultural development.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 452,766 acres for locatables and 454,389 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 25% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative C for details of improvements. Range condition improvements would benefit the soil resource as discussed in Alternative B.

Range improvement activities (burning, spraying and disking) would impact the area as described in Alternative B. Six miles of pipeline are proposed.

Livestock AUM decreases of 19% are proposed over a 20 year period. By incorporating grazing systems and with the addition of range improvement projects this decrease in AUMs would result in an average decrease in soil loss of about 0.2 tons/acre/year on grazed lands. Erosion would still be a problem around livestock concentration areas.

Fencing 13 miles and streambank planting of 15 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management

would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

There would be no long-term adverse affects to air quality under this alternative. A one to two day localized decrease in air quality would occur due to prescribed burning for rangeland improvements and slash burning after timber harvest.

Where spraying of herbicides is used to control brush and/or annual grasses a one to two hour reduction in air quality would result.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would moderately improve due to the 14 stream miles of riparian exclosures and the 10 miles of improved stream habitat due to reduced stocking rates. Water quality would be maintained or very slightly improve on 18 miles of perennial streams and 124 miles of intermittent streams due to management in revised and new AMPs. High fecal coliform levels and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams with revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 3-11 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 3-11 miles as above from the proposed 20 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation due to ORV use would be negligible because 99% of the total area is classified as limited use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would moderately improve.

Vegetation

The long-term vegetative condition would show an overall improvement on 20 to 25% of the RMP area. Increases would dominantly be within the existing class, but many areas (fair condition mostly) would increase in condition to the next higher class. On approximately 9% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 16% (33,000 acres), fair improved - 35% (73,500 acres), good improved - 38% (13,000 acres). Trend data is not available.

This increase would mainly be due to the projected 19% reduction in livestock AUMs (over 20 years) and the incorporation of grazing systems along with rangeland improvement projects. Decreased livestock AUMs would promote more vigor and productivity increasing total vegetative cover.

Livestock and wildlife improvement projects would occur on 10% of the RMP area. These and the areas affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

The gradual encroachment of annual grasses into poor and fair rangeland would continue (see Vegetation Alternatives A and B).

Limited and closed ORV designation for most of the RMP area would protect and enhance the vegetative condition of areas that without this designation may have been adversely affected.

The curlew habitat and Columbian sharp-tailed grouse habitat areas would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 6 research natural areas totaling 1,215 acres would provide protection and increased vigor for several candidate and sensitive plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be enhanced for these areas.

Closing ORV use on 1,365 acres, limiting ORV use on 920 acres and excluding surface and subsurface rights-of-way on 2,285 acres should provide for the continued existence of candidate and sensitive plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized. Some species may decrease in numbers outside of these protected areas because small scattered populations and undiscovered populations are not protected from grazing, ORV use, annual grass invasion or other hazards.

Some plant populations which have been damaged under current management practices might increase in number of individuals, vigor, and even new populations may be colonized because of the reduced grazing levels.

The exclusion of locatable mineral development on 1,175 acres would protect plant species within these areas. These restrictions would protect individual plants directly and indirectly by decreasing soil erosion and discouraging exotic weedy annuals, thereby decreasing the probability of wildfire. No surface occupancy restrictions would protect plants on 2,285 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. One mile of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 107 miles of the 122 miles surveyed while 12 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of condition quality due to increased stocking levels would occur on 3 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in some improvement of riparian habitat on approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 122 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of 0.5 MMBF and the associated 20 miles of road construction would have a minimum impact on riparian habitat along 2-8 miles of the potentially impacted 39 miles of perennial streams and 1-3 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV impacts on riparian vegetation would be very slight due to limited use classification along streams in high erosion hazard areas. Streamside habitats are used occasionally by ORVs and established woody riparian vegetation would not be impacted.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wild fires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Due to land transfer proposals in this alternative one mile of perennial stream would be eliminated from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 57 miles of the remaining 80 miles while 23 miles would improve to the next higher class in habitat quality due to a combination of reduced stocking levels and aquatic habitat improvement projects.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in the improvement of approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management strategy would also benefit approximately 124 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of 0.5 MMBF and the associated 20 miles of road construction would impact 2-8 miles of the 39 miles of perennial

streams within the total harvest acreage. Also impacted would be 1-3 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A very slight increase in stream sedimentation over the long term would result from roads constructed in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures considered on a case-by-case basis to further minimize sediment loads.

Sediment loads associated with ORV use would be negligible as 99% of the total area would be classified as limited use. This would protect high erosion hazard areas adjacent to drainages.

Redband trout populations would increase over the long term on segments of 6 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 13 miles of riparian habitat is eliminated. Habitat condition improvement on 10 stream miles due to decreased stocking rates would result in a slight increase in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be very slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Under this alternative both elk fall/winter ranges and crucial winter ranges would show a 7% increase in the number of acres in good condition. This would be due to the 27% decrease in livestock AUMs. An increase in the use of grazing systems and livestock management would also contribute to improving the habitat condition.

Approximately 550 acres of fall/winter range would be seeded to grass and forbs. Range and wildlife seedings on 8,285 acres of crucial winter ranges, are proposed under this alternative. All these seedings would improve the carrying capacity of the range. The 3,000 acres of aerial seeding proposed for the Snake River Breaks would also increase the shrub component on this crucial winter range.

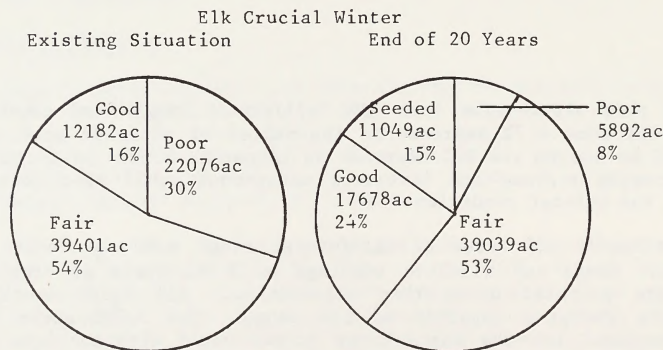
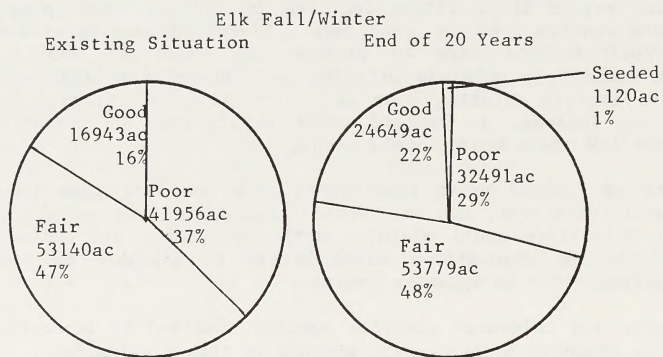
There are approximately 280 acres of timber sales proposed in elk fall/winter ranges and 2,936 acres proposed on crucial winter ranges. The

20 miles of logging roads could put additional pressure on populations during hunting season. Resource Management Guideline adherence would keep impacts to a minimum.

There are approximately 1,220 acres of crucial habitat proposed to be sold or exchanged. This would have negative impacts unless the land were exchanged for habitat of better or equal value.

Overall due to the 19% decrease in livestock AUMs in 20 years, the increased range and wildlife seedings, 12 new AMPs, and increased livestock management, the elk habitat is expected to be able to support a 35% increase in populations over current numbers. This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Mule Deer

The number of acres of mule deer fall/winter and crucial winter ranges in poor ecological condition would decrease by 7%. This would occur mainly because of the 27% decrease in livestock AUMs. The range program would also increase use of grazing systems and improve livestock management under this alternative.

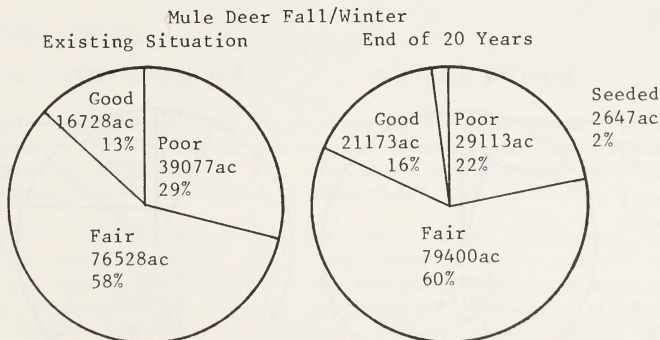
There are 1,200 acres of range projects in fall/winter ranges and 16,880 acres of range and wildlife seeding projects in crucial winter ranges proposed under this alternative. These projects would increase the forage base and carrying capacity of the range. There are also 3,000 acres of deer and elk crucial habitat proposed to be aerial seeded along the Snake River Breaks.

The 134 acres of timber sales in the fall/winter ranges should have minimal impacts on the habitat. The 332 acres of timber sales in the crucial winter ranges and the 20 miles of proposed roads could produce more pressure on the population during the hunting season.

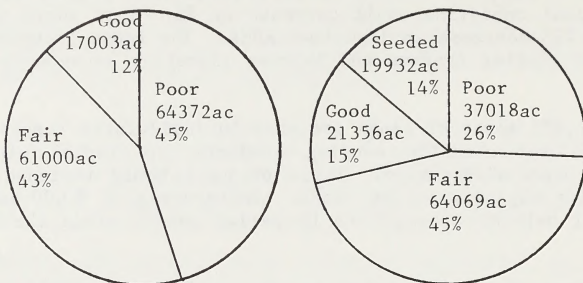
The 12,000 acre Boise Front ACEC would be managed for mule deer crucial winter range. Improvements to vegetation on the area would improve the carrying capacity of this crucial habitat.

The 19% decrease in livestock AUMs over 20 years, improved livestock management and wildlife seedings are expected to improve the carrying capacity of the habitat to support an overall 35% increase in the deer population of the resource area. This would exceed the population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing habitat and 20-year projected habitat conditions are shown below.



Mule Deer Crucial Winter
Existing Situation End of 20 Years



Antelope

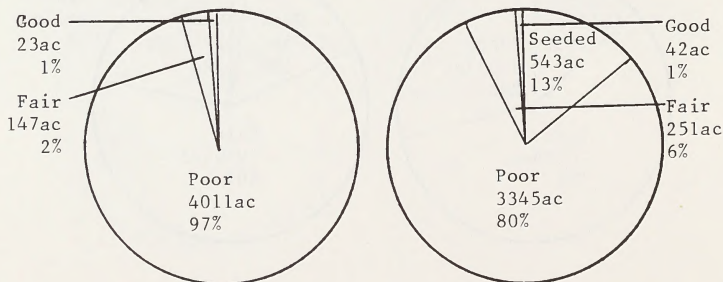
Crucial antelope winter ranges will show a slight improvement over current conditions. Approximately 12% of the range would be seeded to improve the carrying capacity of the habitat.

The 19% decrease in livestock AUMs and improved livestock management and wildlife seedings would provide sufficient forage to support 200 animals. Seedings will emphasize the shrub component of the habitat.

This would exceed population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

Antelope
Existing Situation End of 20 Years

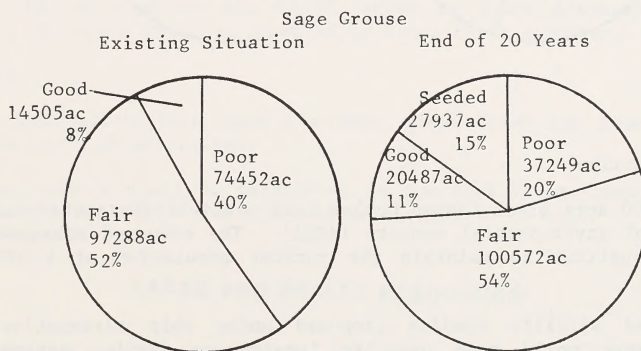


Sage Grouse

Overall, sage grouse habitat would show an improvement under this alternative. The 19,616 acres of range and wildlife seedings and the 19% reduction in available AUMs would improve the density of vegetation needed for nesting and brood-rearing habitat.

Seedings which do not include sagebrush would not increase the forage factor for sage grouse. It would, however, relieve the pressure on local native ranges.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.

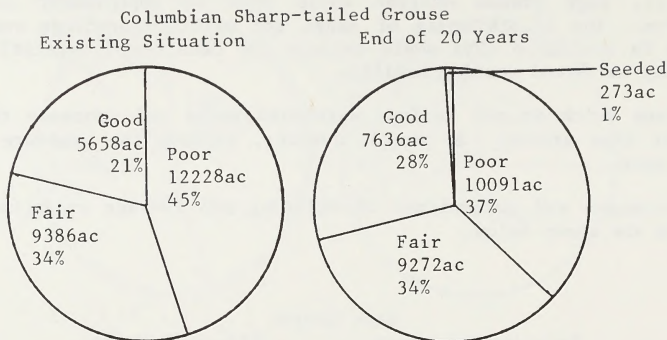
Sensitive Animal Species

Columbian Sharp-tailed Grouse

Sharp-tailed grouse habitat would show a 7% improvement over current condition class. This would be due to the decrease in livestock AUMs and improved livestock management. The 272 acres of proposed seedings would also help improve nesting and brood-rearing cover.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed habitat and should stimulate population growth.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Long-billed Curlew

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an area of environmental concern (ACEC). The proposed management would protect the habitat to maintain the current population of 1,000 nesting pairs.

Range and wildlife seeding proposed under this alternative in the remaining areas would have negative impacts on nesting curlews. Most species of grasses are too tall to be used as nesting habitat.

Livestock

Under this alternative short and long term (5-year and 20-year) livestock forage levels would be reduced 27% for wildlife, watershed, and range condition improvement. This reduction would be a decrease of approximately 18,000 AUMs. With this planned reduction those native ranges that contain perennial/annual grass mixtures would show improvement, especially in density and vigor of perennials. Native shrubs would increase in size and occurrence.

Ranges containing predominantly annual grasses (medusahead/cheatgrass) may experience an increase in perennial grasses. In many areas however, the medusa "problem" would remain a problem.

Reducing the amount of forage utilized by livestock in the fall on many allotments (spring/fall ranges) would result in increased available forage for wintering deer and elk. Priority would be given to allotments in which major mule deer and elk winter ranges occur.

A loss of 9,200 acres of forest lands to exchange would further reduce livestock forage 277 AUMs.

Special designation/historic and cultural withdrawals of 1,015 acres would remove 183 AUMs, and transfers of 5,962 acres out of federal ownership would remove an additional 900 AUMs from current available livestock forage. With planned seedings of 3,000 acres generating approximately 1,000 AUMs, along with the above mentioned losses, AUM levels are projected in the short term (5 years) at 47,345 AUMs. This would be a 29% reduction from the five year average license use.

Over the long term (20 years) an additional 9,600 acres of seedings would produce an additional 3,000 AUMs. Increased livestock management practices on 64,000 acres of native range would increase forage production 3,287 AUMs. With these increases and the projected AUM losses, the overall AUM level over the long term is projected at 53,643 AUMs, which would be a 19% reduction from the five year average license use.

Under this alternative all 63,000 acres of stock driveways would be eliminated. Ranchers would be required to truck their livestock.

Wild Horses

Under this alternative both the West Crane Creek and Four Mile wild horse herds would be maintained.

Maximum numbers would be maintained in the West Crane Creek herd of 30 head, while the Four Mile herd would be maintained at 20 head.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 5,775 acres for exchange, and 11,306 acres for special exchange only for a total of 17,324 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately \$21,600 based on current appraisal for the 80 acres to be sold to Ada County, estimates of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 680 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

The 11,306 acres identified for special exchange would be used for exchanges with the State to acquire nationally significant lands, such as State inholdings in wilderness areas, wild and scenic river corridors, crucial wildlife habitat, threatened and endangered species habitat, or other commercial forest lands of equal or better value (blocking of ownership pattern).

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 11,966 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 6 miles of the North Fork and 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way, with perhaps the exception of the proposed expanded Payette River wild and scenic river designation. Rights-of-way could be rerouted slightly to avoid the smaller areas.

Hydroelectric development would be precluded on Box Creek and on the 6 mile and 8 mile segments of the North and South Fork Payette River.

Withdrawals

All of the lands presently withdrawn for livestock driveways (approximately 63,000 acres) would be revoked from the withdrawals.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Mill Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 17,324 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 3,276 acres open to ORV use, 481,800 acres limited and 2,390 acres closed. The additional closed acres include candidate and sensitive plant sites and Box Canyon ONA. There would be little expected impacts on recreational ORV use.

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

An additional designation of 22,700 acres would seasonally limit ORV use to existing roads and trails in the Columbian sharp-tailed grouse habitat area. The impacts of this restriction would not be significant.

A projected increase of 35% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A.

Lands available for dispersed recreation would be reduced by the 17,323 acres identified for disposal.

Construction of 20 miles of timber harvest access roads (1 mile annually) would increase recreational access potential to the same degree as Alternative A, but generally less than in Alternative B. Some of these roads would be closed after harvesting is completed.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River and six miles and 1,900 BLM acres along the North Fork of the Payette River would be proposed for Wild and Scenic Rivers study. This includes 1,240 acres of commercial forest lands on the South Fork and 508 acres on the North Fork.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor uses.

Visual

The positive effects of an intensively managed Boise Front ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 151 miles of rivers and streams would improve the visual resource in these locations.

Harvesting 0.5 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvests would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Fences, reservoirs, pipelines and vegetative manipulations are proposed, and have been discussed in Alternative A. Impacts would not be significant.

Transferring 17,323 acres of land from public ownership could result in impacts on the visual resource. See discussion in Alternative B.

Leasables

MINERAL RESOURCES

Oil and Gas

The proposed 4,500 acre withdrawals along the Payette River include 2,600 acres covered by existing power site and Bureau of Reclamation withdrawals and 1,900 additional acres currently open. None of these areas are classified as prospectively valuable for oil and gas. The impacts of the withdrawal would be insignificant. About 93% of the area would remain open for oil and gas leasing.

No surface occupancy stipulations under this alternative total 7,434 acres. The lands involved are generally small and are not identified as prospectively valuable for oil and gas. The 500 acre Pickles Butte Play Area and the 3,000 acre Little Gem Cycle Park area no surface occupancy restrictions may be a significant adverse impact on oil and gas exploration and development in the areas involved.

The effects of time stipulations on oil and gas exploration are consistent throughout this plan. Those effects are considered insignificant. See Alternative A for the analysis of their impacts.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

The proposed 4,500 acre withdrawals along the Payette River includes 2,600 acres covered by existing power site and Bureau of Reclamation withdrawals and an additional 1,900 acres currently open. This means that 93% of the area would remain open for geothermal leases. No other withdrawals are proposed. The impacts would be insignificant.

No surface occupancy stipulations under this alternative total 7,434 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area. The impacts would be considered insignificant.

Time stipulations are the same as Alternative A and are considered insignificant.

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be insignificant.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be insignificant.

Locatables

A total of 17,324 acres of land are proposed to be transferred from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is paid for, or lands of equal overall values are obtained. The impact from land

transfer on the availability of lands for mineral location and development would therefore be insignificant.

The resource area would have 93% of its lands open to mining activity. Those areas closed to mining include 31,177 acres of existing withdrawals, a 2,600 acre overlapping withdrawal and a new withdrawal of 1,900 acres along the Payette River, and various small protective withdrawals amounting to 1,623 acres total. Because the 2,600 acre Payette River withdrawal overlaps existing withdrawals, it would not have any significant impacts on the availability of lands for locatable mineral discovery and development. The new 1,900 acre Payette River withdrawal would not be a significant impact.

The largest of the other withdrawals are Rebecca Sandhill, Summer Creek, Goodrich Creek and Box Creek. None of these areas are within zones of mineral interest and none of them have any record or history of mineral locations. The impacts from these withdrawals would be insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

The impacts of this alternative on mineral materials would be the same as that for Alternative A. Decisions on allowing or not allowing mineral material sales from any particular site would be made on a site specific basis.

FOREST RESOURCES

Timber

Under this alternative the total acres of commercial forest land would be reduced by 7,241 CFL set aside acres. The impact of this reduction in the number of high productive and high volume per acre commercial forest land would result in the lowering of the allowable cut to 0.5 million board feet.

FIRE MANAGEMENT

Same as Alternative A.

ECONOMICS

Crop Agriculture

With this alternative there would be no new agricultural development.

Livestock

The 5-year livestock forage level would be 47,233 AUMs. This would support 3,936 animal units which would generate earnings of \$1.9 million. This would be 7% of the total permittee earnings, 4% of the RMP area meat

animal earnings, and 2% of total farm earnings. The total earnings (including the multiplier effect) would be \$5.1 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 68 jobs. This would be 2% of the 1983 farm wage and salary employment. The total earnings would generate 235 jobs. This would be 0.2% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between \$2.6 and \$11.8 million.

The 20-year livestock forage level would be 53,543 AUMs. This would support 4,462 animal units which would generate earnings of \$2.2 million. This would be 9% of total permittee earnings, 5% of the RMP area meat animal earnings, and 2% of total farm earnings. The total earnings (including the multiplier effect) would be \$5.8 million. This would be 0.2% of total RMP area 1983 earnings.

The direct earnings would generate 77 jobs. This would be 2.2% of the 1983 farm wage and salary employment. The total earnings would generate 266 jobs. This would be 0.2% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between \$3.0 and \$13.4 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 0.5 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of \$107,500. This would be 0.04% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be \$257,500. This would be 0.01% of the total RMP 1983 earnings.

The harvest level would lead to 5 jobs (Youngblood 1983). This would be 0.03% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 13. This would be 0.01% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately \$1.6 million.

Summary

The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$5.1 million and 235 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$5.8 million and employment of 266 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$257,500 and 13 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.6 million.

ALTERNATIVE D

RANGELAND RESOURCES

Soils

Broad based long-term erosion rates would show an average increase of 0.2 tons/acre/year (10%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be the same as described in Alternative A. Closed ORV areas have a high probability of gaining long-term benefits to watershed and site productivity on an additional 1,765 acres.

Commercial timber harvest is proposed on 200-1,200 acres annually with allowable annual cuts of 2.9 million board feet. Selective and clearcutting would be used. To accomplish this harvest 5.8 miles/year of roads, over a 20 year period, would be built. Resulting impacts would be the same as described in Alternative A and Affected Environment.

The transfer of public lands includes 560 acres for agricultural development. The impacts associated with farming would be the same as described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 454,666 acres for locatable and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 19% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative D for details of improvements. Range condition improvements would benefit the soil resources as discussed in Alternative B.

Range improvement activities (burning, spraying and disking) would impact the area as described in Alternative B. Thirty-six miles of pipelines are proposed.

Livestock AUM increases of 15% are proposed over a 20 year period. With the addition of grazing systems and the proposed range improvement projects this increase would result in a slight increase in erosion rates (up to 0.1 tons/ acre/year on grazed lands). Most studies have shown that runoff and erosion increase with grazing intensity (Lusby 1979a, Gifford and Hawkins 1978). Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Environmental Consequences

Fencing 14 miles and streambank planting of 17 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

Impacts to air quality would be the same as described under Alternative B.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would increase slightly on four stream miles due to an increase in grazing. Water quality would be maintained or very slightly improve on 30 miles of perennial streams and 176 miles of intermittent streams due to management in revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 8-49 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 8-49 miles as above from the proposed 116 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

Sedimentation due to ORV use would be negligible because 99% of the total area is classified as limited use.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly decline.

Vegetation

The long-term vegetative condition would show an overall improvement on 14 to 19% of the RMP area. This increase would not always reflect a total change in condition class. In many areas the general condition would improve but not enough to change classes. On approximately 19% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 25% (46,000 acres), fair improved - 21% (40,500 acres), good improved - 3% (1,000 acres). Trend data is not available.

Increasing livestock AUMs by 15% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The

projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. These increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches. See Livestock Management Alternative D for details.

Rangeland and wildlife improvements would affect 12% of the RMP area. These and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

The gradual encroachment of annual grasses into poor and fair rangeland would continue (see Vegetation Alternatives A and B).

Impacts associated with ORV use would be similar to those discussed in Alternative C.

The curlew habitat and Columbian sharp-tailed grouse habitat areas would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 6 research natural areas totaling 1,215 acres would provide protection and increased vigor for several candidate and sensitive plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be enhanced for these areas.

Closing ORV use on 1,365 acres, limiting ORV use on 920 acres and excluding surface and subsurface rights-of-way on 2,285 acres should provide for the continued existence of candidate and sensitive plant species. Some species may increase in numbers due to the protection provided while other plant species would be stabilized. Some species may decrease in numbers outside of these protected areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wildfires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

The exclusion of locatable mineral development on 1,175 acres would protect plant species within these areas. These restrictions would protect individual plants directly and indirectly by decreasing soil erosion and discouraging exotic weedy annuals, thereby decreasing the probability of wildfire. No surface occupancy restrictions would protect plants on 2,285 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions in riparian areas.

Land transfer proposal would not impact the base of 122 miles of surveyed drainages. Two miles of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 94 miles of the 122 miles surveyed while 11 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Loss of condition quality due to increased stocking levels would occur on 17 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 23 new AMPs would result in some improvement of riparian habitat on approximately 30 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 174 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of 2.9 MMBF and the associated 116 miles of road construction would have a minimum impact on riparian habitat along 6-37 miles of the potentially impacted 39 miles of perennial streams and 2-12 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV impacts on riparian vegetation would be very slight due to limited use classification along streams in high erosion hazard areas. Streamside habitats are used occasionally by ORVs and established woody riparian vegetation would not be impacted.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wild fires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Land transfer in this proposal would eliminate 2 miles of aquatic/fisheries habitat from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 55 miles of the remaining 79 miles and 10 miles would improve to the next higher condition class or greater due to aquatic habitat improvement projects. The remaining 14 miles would show a loss of habitat condition to the next lower condition class from impacts related to increased stocking rates.

The revision of 7 existing AMPs and the proposed 23 new AMPs would result in improved habitat quality on approximately 30 miles of perennial

stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management strategy would also benefit approximately 176 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest levels of 2.9 MMBF and the associated 116 miles of road construction would impact approximately 6-37 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 2-12 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and rehabilitation of major disturbed areas. A high increase in stream sedimentation over the long term would result from roads constructed in high erosion hazard areas and adjacent to perennial drainages. All roads would be reseeded and closures considered on a case-by-case basis to further minimize sediment loads.

Sedimentation, an impact on streams associated with ORV use, would be negligible with this alternative because 99% of the total area available would be classified as limited use. This use class would give protection to high erosion hazard areas adjacent to and within stream drainages.

Redband trout populations would increase over the long term on segments of 3 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 10 miles of riparian habitat is eliminated. Decreased habitat condition on 14 stream miles due to increased stocking levels would cause a slight decrease in redband trout populations in those stream reaches over the long term. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities would likely be high. Resource Management Guidelines would help minimize soil disturbance and sedimentation in streams. Flushing streamflows may not be adequate to prevent fine sediment accumulation in spawning gravels in some streams.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Elk fall/winter range would show a slight improvement. This would occur due to improved livestock management. Most improvement would be located in allotments in the northern portions of the resource area. These are areas that are in a high-poor condition and would improve to fair.

Approximately 1,100 acres of fall/winter range would be seeded to grass and forbs. These range projects would help increase the carrying capacity of the areas being seeded.

Approximately 3,977 acres of timber sales have been proposed in fall/winter range over the next 20 years. Impacts on the habitat would be minimal because of Resource Management Guidelines.

Crucial elk winter range is predicted to improve slightly over the next 20 years. This improvement would be due to increased use of grazing systems and livestock management.

Approximately 14,203 acres of timber sales are proposed in crucial elk winter range. Resource Management Guideline adherence would minimize the impacts. The 116 miles of proposed logging roads would open up more country and put more pressure on population.

There are approximately 10,400 acres of range and wildlife seeding proposed in this habitat. These seedings would be designed to protect the habitat and increase the carrying capacity of the area. Approximately 3,000 acres of crucial mule deer/elk habitat would be aerial seeded along the Snake River Breaks.

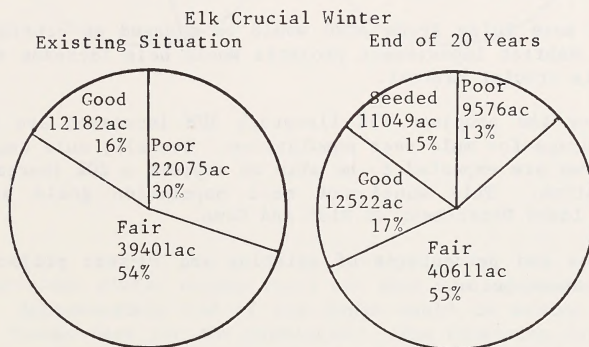
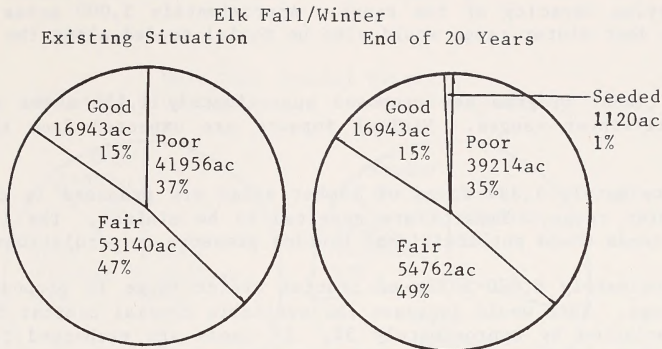
The 4,660 acres of proposed land actions in crucial areas would decrease habitat availability by 6%. If these lands are exchanged for lands of equal or better value, there would be no negative impacts.

The range program is proposing a 15% increase in livestock AUMs over present stocking rates in the next 20 years. At this stocking level, less forage would be available for wildlife use. In the shrub communities, this may become a significant factor.

Overall, there would be increased range and wildlife seedings, increased use of grazing systems and 23 new AMPs. Due to these factors and the fact that currently only 35% of elk habitat is in poor condition the elk habitat should be able to support a 20% increase over current populations.

This would meet population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Mule Deer

Fall/winter ranges would show a slight increase from poor to fair. This increase would occur in the northern areas where higher rainfall occurs and would be due mainly to increased livestock management.

Crucial mule deer winter ranges are predicted to improve slightly over the next 20 years. This improvement would occur in the high-poor areas that would improve to fair condition. The improvement would occur from livestock management and use of grazing systems.

Approximately 2,400 acres of range projects are proposed in these ranges over the next 20 years. This would help increase the carrying capacity of the habitat.

Approximately 20,000 acres of both range and wildlife seedings are proposed in the next 20 years. These seedings would be designed to increase the carrying capacity of the range. Approximately 3,000 acres of crucial elk/mule deer winter range would also be aerial seeded along the Snake River Breaks.

The timber program has proposed approximately 1,136 acres of sales in deer fall/winter ranges. Minimal impacts are expected from these timber sales.

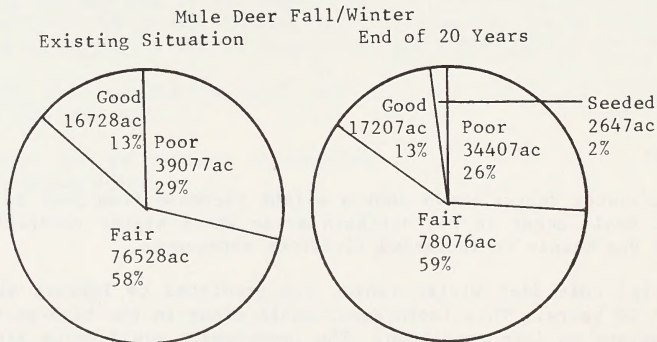
Approximately 1,894 acres of timber sales are proposed in crucial mule deer winter range. Impacts are expected to be minimal. The 116 miles of logging roads could put additional hunting pressure on populations.

Approximately 6,690 acres of crucial winter range is proposed for sale or exchange. This would decrease the available crucial habitat for the mule deer population by approximately 5%. If lands are exchanged for equal or better value, there would be no negative impacts.

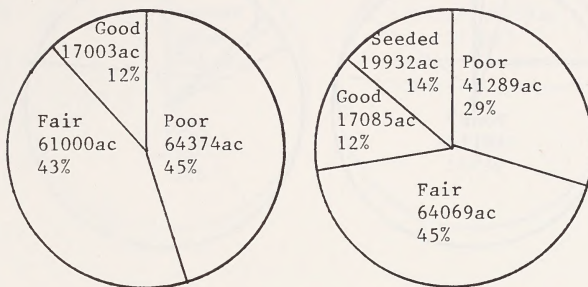
The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. Habitat improvement projects would help increase the carrying capacity of this crucial habitat.

Impacts from the proposed 15% livestock AUM increases are expected to provide less forage for mule deer populations. Overall, mule deer ranges in the resource area are expected to be able to support a 20% increase over the current population. This would not meet population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Mule Deer Crucial Winter
Existing Situation End of 20 Years



Antelope

Crucial antelope winter ranges would not show any improvement under this alternative. Approximately 13% of the range would be seeded. This would increase the forage base for the population. The remaining range would not be seeded due to the infestation of medusahead wildrye.

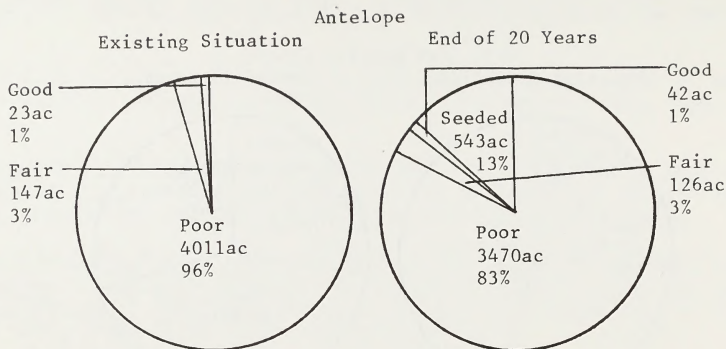
Approximately 10% of this crucial habitat is proposed to be sold or exchanged. This loss of habitat could have negative impacts to the welfare of the herd.

The current population is approximately 50 animals. Through improved livestock management and the use of grazing systems, the habitat is expected to be able to support a population of 100 animals.

Seedings will emphasize shrub species to improve the winter forage factor.

This would not meet the population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sage Grouse

Currently 60% of sage grouse habitat is in fair to good condition. Under this alternative, a slight improvement is predicted.

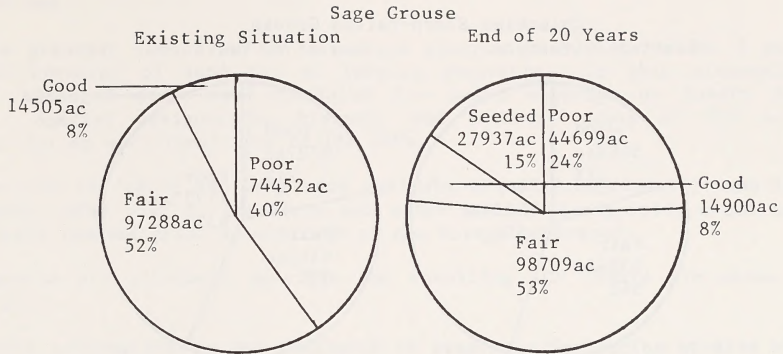
The seedings for both livestock and big game would improve nesting and brood-rearing habitat. These seedings would constitute approximately 15% of available sage grouse habitat. Approximately 9,000 acres occur in the crucial zone or 2 miles from a strutting ground. Disturbance of this area could have negative impacts during the breeding season.

Seedings without sagebrush would not improve the forage factor for this species. They will, however, relieve the grazing pressure on native ranges used by sage grouse.

Approximately 3,900 acres of land located within a crucial zone is proposed for sale or exchange. If these lands are disposed of, negative impacts to nesting habitat could occur.

The proposed 15% increase in livestock AUMs should have minimal impacts to sage grouse habitat. Special management may be necessary in some areas during the mating season.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sensitive Animal Species

Columbian Sharp-tailed Grouse

Currently 55% of sharp-tail habitat is in fair to good condition. Under this alternative habitat would show a slight improvement.

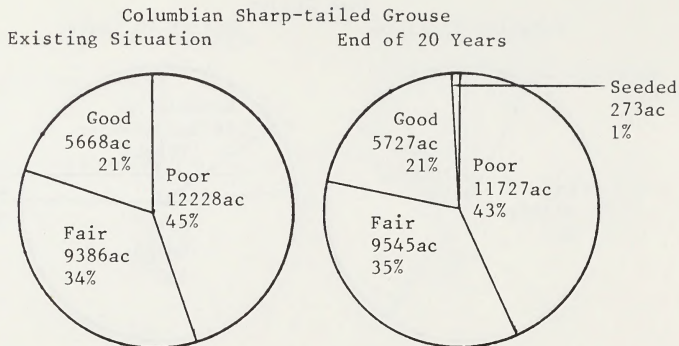
Approximately 272 acres of proposed wildlife seedings are expected to improve the nesting and brood-rearing habitat of the area.

Due to the small population, the proposed 15% increase in livestock AUMs should have minimal impacts on the habitat and population.

The proposed land transfer of 520 acres could have negative impacts if a local population is using the area or a dancing ground is located nearby.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed grouse habitat and should stimulate population growth.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Long-billed Curlew

Range and wildlife seedings proposed under this alternative that occur in areas used by curlew would have negative impacts on nesting habitat. Most species of grasses used in seedings are too high to be used by nesting females.

Approximately 3,750 acres of curlew habitat is proposed for sale or exchange. Negative impacts could occur if vegetative structure is changed and nesting habitat is decreased.

The 61,000 acre Black Canyon Curlew Area would be designated and managed as an area of critical environmental concern (ACEC). The proposed management of the area would protect the habitat to maintain the current population of 1,000 nesting pairs.

Livestock

Under this alternative livestock forage levels would decrease by 5,407 AUMs due to land transferred out of federal ownership. In the short term (5 year protection) with 2,800 AUMs produced on 7,600 acres of seedings, the resulting available forage level of 63,942 AUMs would be a 4% decrease from the present five year average license use of 66,424 AUMs.

Over the long term (20 year protection) additional seedings of 23,000 acres would produce 8,700 AUMs. Installation of improvements (water systems, fencing) along with increased livestock management practices on approximately 76,000 acres of native range would increase forage production an additional 3,900 AUMs.

Total forage production is expected to reach 76,613 AUMs over the long term. This would be a 15% increase from the present five year average license use.

The greatest impact to the livestock program as in Alternative B would be the transfer of land out of federal ownership. In this alternative 33,101 allotted acres are scheduled for sale, exchange or desert land entry. Special designation, historic and cultural areas of 915 acres account for an additional loss of 162 AUMs.

In both the short and long term analysis of range improvements and land treatment, AUMs lost to transfers and other special designation areas were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition where needed. Annual grass ranges (medusahead/cheatgrass) would receive high priority land treatment efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres, and added on 627 acres for a total of 41,390 acres available.

Wild Horses

Under this alternative the Crane Creek herd would be removed.

The Four-Mile herd would be maintained at 20 head. The livestock AUM reduction of 424 AUMs for maintenance of range condition which has been in effect since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 243 acres for sale, 28,750 acres for sale or exchange, 6,174 acres for exchange and 560 acres for Desert Land Entry for a total of 35,727 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately \$21,600 based on a current appraisal for the 80 acres to be sold to Ada County, estimates of the value of the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer or sale or exchange are generally small isolated parcels that are difficult and uneconomic to manage. Their

disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered.

There are three exchange proposals pending in the resource area being considered in this plan. They are referred to as the Brownlee, Little, and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land, however, it is proposed to retain 280 acres of the selected public land for timber production. This would result in a corresponding decrease in the number of acres to be acquired from the State. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in only one estimated trespass case, because of the limited number of acres to be transferred under this category. The average administrative cost for a trespass case is \$1,250.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 9,706 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites, and on the portion of the Payette River recommended for Wild and Scenic River study - 8 miles of the South Fork Payette River. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid the smaller areas.

Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from withdrawals, 40,763 would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of

the public land laws was published, a C&MU classification was placed on it at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 35,727 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost, destroyed, or closed off from scientific study.

RECREATION RESOURCES

Recreation

There would be 3,276 acres open to ORV use, 481,800 acres limited and 2,390 acres closed. These figures represent no change from Alternative C. The limited use areas would decrease by 35,727 acres as lands are transferred from federal ownership. Impacts would be minimal on recreational ORV use.

Impacts from managing the Boise Front as an ACEC would be the same as those discussed under Alternative A for the Boise Front SRMA.

A projected increase of 30% in big game numbers through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for non-consumptive uses would also increase as a result.

The effects of the Pickles Butte DLE would be the same as discussed in Alternative A.

Lands available for dispersed recreation would be reduced by the 35,727 acres identified for disposal.

Construction of 116 miles of timber harvest access roads (5.8 miles annually) will greatly increase recreational access potential in these areas. Some of these roads would be closed after harvesting is complete.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River would be proposed for Wild and Scenic Rivers study. This includes 1,240 acres of commercial forest lands in the corridor.

Identification of special designation areas would cause a slight increase in hiking, sightseeing, and other casual visitor use.

Visual

The positive effects of an intensively managed Boise Front ACEC would be the same as discussed in Alternative A.

Improved riparian habitat on 170 miles of rivers and streams would improve the visual resource in these locations.

Harvesting 2.9 million board feet of timber and the resulting access roads may negatively impact the visual resource. Less obtrusive selective cutting would be the primary harvest method, although some clearcuts, not to exceed 40 acres each, may be proposed. All timber sales would be guided by the appropriate VRM class guidelines. Impacts from timber harvest would be minimal.

Wildlife improvement projects such as fences, guzzlers and vegetation manipulation could negatively impact the visual resource. With the use of standard mitigation measures on these projects, no significant adverse impacts would be expected.

Project development in the range program could negatively impact the visual resource. Fences, reservoirs, pipelines and vegetative manipulations are proposed and have been discussed in Alternative A. Impacts would not be significant.

Transferring 35,727 acres of land from public ownership could result in impacts on the visual resource. See discussion in Alternative B.

Leasables

MINERAL RESOURCES

Oil and Gas

The effects of withdrawals under this alternative would be the same as those of Alternative B and are considered insignificant.

No surface occupancy stipulations under this alternative total 6,934 acres. The lands involved are generally small and are not identified as prospectively valuable for oil and gas. The 500 acre Pickles Butte Play Area and the 3,000 acre Little Gem Cycle Park area "no surface occupancy" restrictions may be a significant adverse impact on oil and gas exploration and development in the areas involved.

Since the lands identified for transfer would have oil and gas reserved in areas identified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the thirty-five dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of this alternative on the availability of oil or gas leasing and development would be insignificant.

Geothermal

The withdrawals and associated impacts would be the same as analyzed in Alternative B. They would be considered insignificant.

"No surface occupancy" stipulations under this alternative total 6,934 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area. The impacts would be considered insignificant.

Time stipulations for the protection of wildlife are consistent throughout the plan and would be insignificant. See Alternative A for the analysis.

Since the lands identified for transfer would have the geothermal estate reserved in areas classified as prospectively valuable, the impact of land transfers would be insignificant.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts of this alternative on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 93% of its lands open to mining activity. Those areas closed to mining include 31,177 acres of existing withdrawals, an overlapping withdrawal of 2,600 acres along the Payette River, and various small protective withdrawals amounting to 1,623 acres total. The 2,600 acre overlapping withdrawal would not be a significant impact. None of the 1,623 acres are within zones of mineral interest and none have any record or history of mineral locations. Therefore, the impacts for these withdrawals would also not be significant.

A total of 35,727 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they

are patented under the mining laws, the mineral estate is purchased at fair market value, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

The impacts of this alternative on mineral materials would be the same as that for Alternative A. Decisions on allowing or not allowing mineral material sales from any particular site would be made on a site specific basis.

FOREST RESOURCES

Timber

Under the high investment alternative the total acres of commercial forest land would be reduced by 1,339 CFL set aside acres. However the impacts of losing this 1,339 acres of commercial forest land would be minimal and with the intensive management of the available CFL the cut would increase to 2.9 million board feet.

FIRE MANAGEMENT

Fire occurrence and suppression costs adjacent to farming developments would remain at Alternative B levels. All other levels would remain the same as with Alternative A.

ECONOMICS

Crop Agriculture

With this alternative there would be 560 acres of agricultural development. The total sales from 560 acres would be \$542,600.

This level of annual sales would generate direct earnings of \$207,800. This would represent 0.2% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be \$529,700. This would be 0.02% of the total RMP area 1983 earnings.

The direct earnings would lead to a gain in farm employment of 7 jobs. This would be 0.2% of the 1983 farm wage and salary employment. The total earnings gain would lead to an increase of 24 jobs. This would be 0.02% of the RMP area 1983 wage and salary employment.

Livestock

The 5-year livestock forage level would be 63,966 AUMs. This would support 5,331 animal units which would generate earnings of \$2.6 million. This would be 10% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$6.9 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 92 jobs. This would be 2.7% of the 1983 farm wage and salary employment. The total earnings would generate 318 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between \$3.6 and \$16.0 million.

The 20-year livestock forage level would be 76,613 AUMs. This would support 6,384 animal units which would generate earnings of \$3.1 million. This would be 12% of total permittee earnings, 7% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$8.2 million. This would be 0.4% of total RMP area 1983 earnings.

The direct earnings would generate 111 jobs. This would be 3.2% of the 1983 farm wage and salary employment. The total earnings would generate 382 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between \$4.3 and \$19.2 million.

Recreation

Impacts would be the same as for Alternative A.

Lumber and Wood Products

Approximately 2.9 million board feet of wood products would be harvested annually with this alternative. This would generate earnings of \$645,000. This would be 0.2% of the RMP area durable manufacturing 1983 earnings. The total earnings (including the multiplier effect) would be \$1.5 million. This would be 0.07% of the total RMP 1983 earnings.

The harvest level would lead to 30 jobs (Youngblood 1983). This would be 0.2% of the 1983 manufacturing wage and salary employment. Total employment (including the multiplier effect) would be 77. This would be 0.06% of the total 1983 RMP area wage and salary employment.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately \$2.5 million.

Summary

Total crop agricultural earnings and employment would increase by \$529,700 and 24 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$6.9 million and 318 jobs. These are both less than one-half of one percent of the RMP area earnings and employment. The 20-year stocking level would lead to total earnings of \$8.2 million and employment of 382 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood product earnings and employment would be \$1.5 million and 77 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$2.5 million.

ALTERNATIVE E (PREFERRED ALTERNATIVE)**RANGELAND RESOURCES**Soils

Broad based long-term erosion rates would show an average increase of 0.05 tons/acre/year (2%) over current levels. This increase is within the estimated average soil loss tolerance of 2 to 3 tons/acre/year. The erosional processes described for land use actions in the Affected Environment and Alternative A would be the same for this alternative, but the area size and/or magnitude of the impact may vary considerably (Appendix B). Specific uses and actions would be responsible for significant short and/or long-term erosion on isolated areas. These would be ORV use, timber harvest, road building, agricultural development, range projects, and mineral exploration and/or development.

Impacts from ORV use would be the same as Alternative A.

Commercial timber harvest is proposed on 100-400 acres annually with allowable annual cuts of 1 million board feet. Selective cutting would generally be used with clear cutting as an option. To accomplish this harvest 2.0 miles/ year of roads, over a 20 year period, would be built. Resulting impacts would be the same as described in Alternative A and Affected Environment.

The transfer of public lands include 480 acres for agricultural development. The impacts associated with farming are the same as described in Alternative A.

Impacts due to ROWs would be the same as Alternative A.

Mineral exploration and development would be open on 456,281 acres for locatables and 456,289 acres for leasables. Impacts would be the same as described in Alternative A.

Range condition improvement is projected for 27% of the RMP area. See Chapter 2 - Livestock, Vegetation, and Wildlife, Alternative E for details of improvements. Where range condition is improved through enhancement of vegetation density and/or composition, erosion rates would be reduced. Rates would decrease from 0.1 to as much as 1 ton/acre/year. The amount would depend on the degree of vegetative improvement, the success, and the following management of the area. Where annual range is converted to seedings the susceptibility to wildfires would be greatly reduced.

Where burning, spraying, disking or any combination of the three are used, with or without seeding, a short-term (one to two year) increase in soil loss would result. This would be due to loss of vegetative cover and surface disturbance. But as vegetation becomes reestablished and density and/or composition improved, long-term erosional decreases would be expected. Twelve miles of pipelines are proposed.

Livestock AUM increases of 6% are proposed over a 20 year period. By incorporating grazing systems and with the proposed range improvement

projects this increase would result in a very slight increase in erosion rates (up to 0.05 tons/acre/year) on grazed lands. Erosion would show the largest increases around livestock concentration areas and on steep hillsides.

Fencing 10 miles and streambank planting of 7 miles of riparian habitat would affect soils as described in Alternative A.

Designation of the Boise Front ACEC and the Sage Creek ACEC would provide special management for these areas (see appropriate ACEC). This management would enhance vegetative condition, increase watershed proficiency, and reduce soil loss.

Air Quality

Impacts on air quality would be the same as described under Alternative B.

Water Quality

Parameters such as ammonia, total inorganic nitrogen, and fecal coliform that are influenced by livestock grazing would slightly improve due to the proposed 11 stream miles of riparian exclosures. Water quality would be maintained or very slightly improved on 18 miles of perennial streams and 124 miles of intermittent streams due to management in revised and new AMPs. High fecal coliform levels and sedimentation from streambank grazing activities would be eliminated from those stream reaches excluding livestock and reduced in those streams within revised and new AMPs.

A short-term increase in sedimentation would likely occur on a range of 4-16 miles of streams due to timber harvest activities. A slight increase in sedimentation would occur over the long term on the same 4-16 miles as above from the proposed 40 miles of road construction.

Range fires contribute to high sediment loads in streams due to the loss of upland and riparian vegetative cover. This impact would be minimized by full fire suppression and rehabilitation efforts.

ORV use in the limited use areas would occur on 47% of the area. This would result in a very slight increase in sediment in streams in these areas. Open ORV use would occur on 53% of the area and would occur on those areas of basaltic parent materials. A slight increase in sediments would occur in streams within the open ORV use classification areas.

Resource management guidelines for the maintenance and protection of riparian and aquatic habitats would have long term positive benefits on the quality of water on public lands by improving management of riparian areas.

Overall, water quality on public lands from this level of management would slightly improve.

Vegetation

The long-term vegetative condition would show an overall improvement on 22 to 27% of the RMP area. This increase would not always reflect a total change in condition class (i.e., fair to good). In many areas the general

condition would improve but not enough to change classes. On approximately 16% of the poor condition range this change would reflect a seeding. Approximate breakdown where improvements are projected would be: poor changed or improved - 28% (56,000 acres), fair improved - 32% (66,230 acres), good improved - 11% (3,680 acres). Trend data is not available.

The encroachment of annual grasses (medusahead wildrye and cheatgrass) into fair and poor condition rangeland would continue. This would be most prominent on the sedimentary and lower elevation basalt soils. These areas tend to be very susceptible to invasion once disturbed (wildfires or heavy use by livestock). Full fire suppression and rehabilitation efforts would gradually reduce the total number of acres burned annually.

Increasing livestock AUMs by 6% over 20 years is proposed. By incorporating grazing systems along with range improvement projects this increase would not adversely affect the projected condition increase. The projected increases do however depend on the success of range improvement projects and how effectively grazing systems are utilized. Those increases in condition would be most notable on the fair condition rangeland. A majority of the RMP area would show good response to management due to productive soils and having an average annual precipitation of greater than 13 inches.

Rangeland and wildlife improvements would affect 10% of the RMP area. These improvements and the acres affected are listed in Chapter 2 - Livestock, Vegetation, and Wildlife. The success of rangeland seedings where poor condition annual range is converted is questionable at this point in time.

Impacts associated with ORV use would be the same as described in Alternative A.

The curlew habitat area and Columbian sharp-tailed grouse habitat area would be affected as discussed in Alternative A.

Candidate and Sensitive Plant Species

The designation and management of 6 research natural areas totaling 1,215 acres would provide protection and increased vigor for several candidate and sensitive plant populations. These areas may act as centers of dispersal for the plant species. Public awareness would also be increased in these areas.

Closing ORV use on 1,365 acres, limiting ORV use on 920 acres and excluding surface and subsurface rights-of-way on 2,285 acres should provide for the continued existence of candidate and sensitive plant species. Some species may increase in number due to the protection provided while other plant species would be stabilized but would not have an opportunity to increase. Some species may decrease in numbers outside of these areas because small scattered populations and undiscovered populations would not be protected from grazing, ORV use, annual grass invasion or other hazards.

The increased grazing pressure would destroy some plant populations. This increased grazing would further the invasion of exotic weedy annuals by the selective grazing of the more palatable perennial species. Exotic weedy

annuals compete with native flora, negatively impacting native plant populations. Annuals increase the probability of wild fires which cause a perpetuation of annual grass ranges and poor ecological conditions. Some plant species could be eliminated or reduced in areas recurrently burned.

Due to the lack of restrictions on locatable mineral development, some individual plants or small populations could be destroyed. Procedural compliance with the Endangered Species Act would keep these impacts below the level of significant to the species as whole. No surface occupancy restrictions would protect plants on 2,285 acres from leasable mineral exploration and development.

Riparian Habitat

Resource management guidelines for various programs should maintain overall existing riparian habitat quality and minimize impacts of actions within riparian areas.

Land transfer proposals would not impact the base of 122 miles of surveyed drainages. One mile of unsurveyed perennial habitat would be transferred from public ownership. Habitat quality would be maintained on 102 miles of the 122 miles surveyed while 16 miles would improve to the next higher condition class due to a combination of reduced stocking levels and aquatic habitat improvement projects. Reduced condition quality due to increased stocking levels would occur on 4 miles of stream riparian habitat.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in some improvement of riparian habitat on approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 124 miles of surveyed and unsurveyed intermittent riparian habitats.

Proposed timber harvest level of 1 MMBF and the associated 40 miles of road construction would have a minimum impact on riparian habitat along 3-12 miles of the potentially impacted 39 miles of perennial streams and 1-4 miles of the 13 miles of intermittent drainages within the total harvest acreages. Resource management guidelines would protect riparian vegetation by providing a no-cut buffer strip along drainages and prohibiting road construction within riparian areas (except for crossings where absolutely necessary).

ORV use in the limited use areas would occur on 47% of the area and would have a slight impact on riparian vegetation within those areas. Drainages are often used as travel corridors by wildlife and humans. With no use restrictions on 53% of the area, riparian areas within these open ORV use areas would likely be moderately impacted resulting in long term disturbances to vegetation and soils and short term disturbance to associated riparian wildlife.

Full fire suppression and rehabilitation efforts would have a long term beneficial impact because loss of riparian vegetation due to wildfires would be minimized and gradually reduced.

Loss of riparian habitat attributed to a slight increase in mining activities would be minimal.

Aquatic/Fisheries Habitat

Land transfer proposals in this alternative would eliminate one mile of perennial stream from the 81 miles of the surveyed aquatic/fisheries habitat base. Habitat quality would be maintained on 66 miles of the remaining 80 miles while 14 miles would improve to the next higher condition class or greater due to aquatic habitat improvement projects.

Revision of 7 existing AMPs and the proposed 12 new AMPs would result in the improvement of approximately 18 miles of perennial stream habitat by including livestock grazing strategies that promote the vigor of streamside woody vegetation which is an important component of streambank stability. This management would also benefit 124 miles of surveyed and unsurveyed intermittent streamside habitats.

Proposed timber harvest level of 1.0 MMBF and the associated 40 miles of road construction would impact 3-12 miles of the 39 miles of perennial streams within the total harvest acreage. Also impacted would be 1-4 miles of intermittent drainages. Short term increased sedimentation levels associated with this level of timber harvest would be minimized by Resource Management Guidelines and the rehabilitation of major disturbed areas. A slight increase in stream sedimentation over the long term would result from road construction in high erosion hazard areas and adjacent to perennial drainages. All roads would be stabilized and closures considered on a site specific basis to further minimize sediment loads.

Sediment load associated with ORV use would slightly increase within the open ORV use areas and result in a long term impact on low gradient streams unable to attain flushing flows. A slight increase in sediment would occur in streams within limited and closed ORV use areas.

Redband trout populations would increase over the long term on segments of 4 creeks due to livestock exclusion fencing. Habitat components important for salmonid spawning and rearing would likely improve as livestock grazing pressure on 11 miles of riparian habitat is eliminated. Livestock grazing strategies that are incorporated into AMPs to promote the vigor of woody streamside vegetation would help maintain existing good riparian habitat and would be expected to slightly improve existing poor and fair condition riparian habitat. A corresponding slight increase in redband trout populations in perennial streams within these AMP areas would likely occur.

Impacts on redband trout populations over the long term due to timber harvest activities and ORV use would likely be slight. Resource Management Guidelines would minimize soil disturbance and sedimentation in streams. Flushing streamflows would likely be adequate to prevent fine sediment accumulation in spawning gravels.

Warmwater and coldwater gamefish species confined to reservoir habitats would not be impacted by management actions in this alternative.

Wildlife

Elk

Both fall/winter and crucial winter ranges would show a slight improvement in this alternative. The improvement would be in northern regions in the higher precipitation zones.

All seedings proposed in Alternative D are also proposed in this alternative.

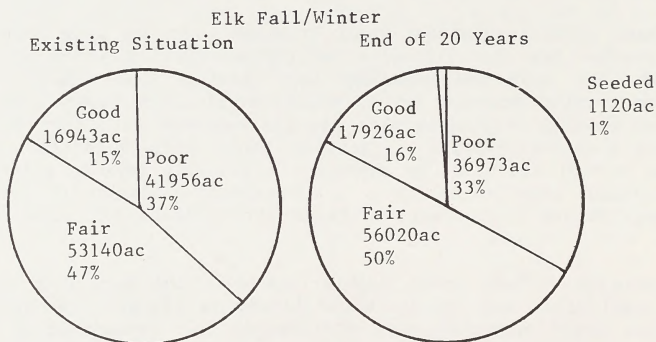
Impacts from timber sales would be the same as described in Alternative A and would be minimized by following resource management guidelines.

There are 4,660 acres of crucial habitat proposed for exchange with the state. Impacts would be minimal because the exchange would be for land of equal or greater value for wildlife.

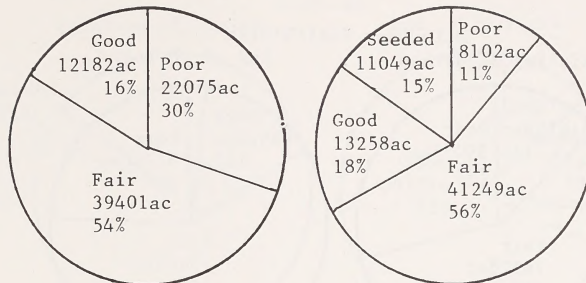
Overall there would be increased range and wildlife seedings. These seedings, would be multi-purpose and the grass, forb and shrub mixture will consider the needs of both wildlife and livestock. Currently, 65% of the habitat is in fair to good condition. The cumulative improvements of range and wildlife seedings, increased use of grazing systems and more AUMs provided for elk would support the proposed 22% increase in the population.

This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Elk Crucial Winter
Existing Situation End of 20 Years



Mule Deer

Fall/winter and crucial winter deer ranges should show a slight improvement over the current situation. These improvements would most likely occur in the higher precipitation zones.

All seedings proposed in Alternative D are also proposed in this alternative.

Impacts from timber sales in this alternative would be the same as described in Alternative A and would be minimized by following resource management guidelines.

There are 6,690 acres of crucial winter habitat proposed for exchange with the state. Impacts would be minimal because the exchange would be for lands of equal or higher value for wildlife.

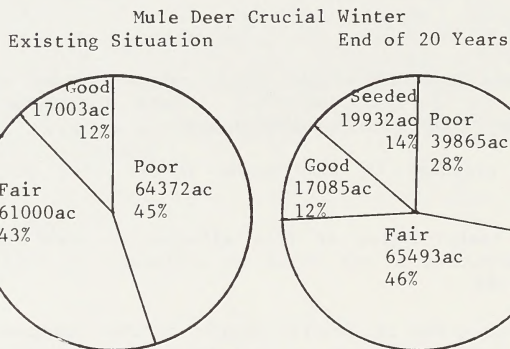
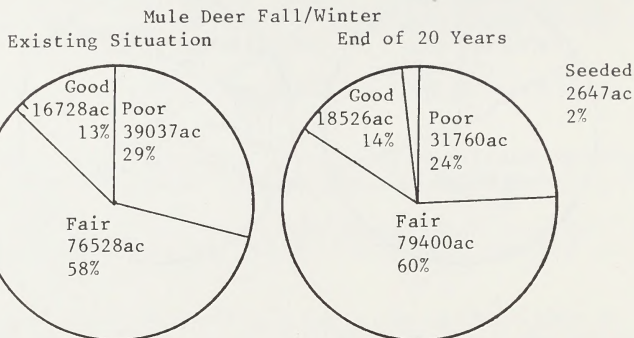
The 12,000 acre Boise Front ACEC would be managed as crucial mule deer winter range. The Snake River Breaks, on the western border of the resource area, is another very important crucial deer and elk winter range. Intensive livestock management will have to be considered on this area (from Grouse Creek north to Indian Creek) to provide enough forage for wintering herds.

Currently, 55% of the crucial winter range is in fair to good condition. In the fall/winter range, 70% is in the fair to good class. Considering the current condition, proposed seedings and availability of AUMs for wildlife, the habitat would be able to support the proposed 33% increase in the population.

This would exceed population goals set for the habitat by the Idaho Department of Fish and Game.

Environmental Consequences

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



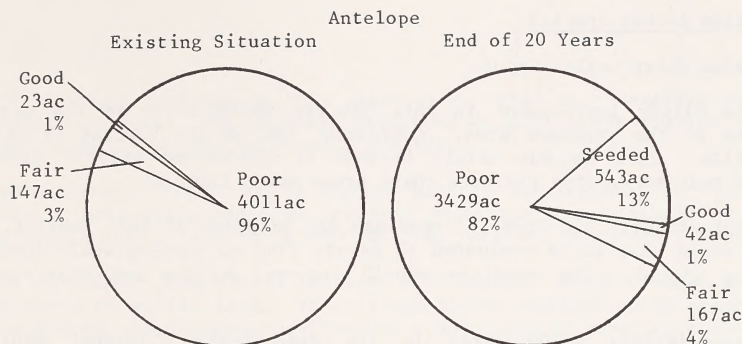
Antelope

Crucial antelope winter ranges would show little improvement under this alternative. The ranges, however, are dominated by medusahead wildrye. Eradication techniques for medusahead ranges have not been fully developed and are not economical.

The current population of the resource area is 50 animals. After improvements 13% of the range would be seeded, and with the increased use of grazing systems in the area, the habitat should support a population of 175 animals.

This would exceed the population goals set for the area by the Idaho Department of Fish and Game.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



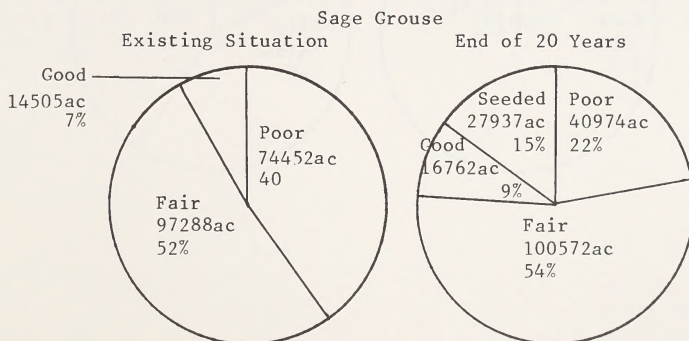
Sage Grouse

Currently, 60% of the sage grouse habitat is in fair to good condition. A slight improvement in the habitat would occur due to livestock management.

All seedings proposed in Alternative D are also proposed in this alternative. The seedings which would constitute 15% of the habitat would improve nesting and brood-rearing habitat.

Approximately 1,040 acres of habitat are proposed for sale or exchange. Each parcel would be evaluated as to its importance to the local sage grouse population. All habitat crucial to the sage grouse population will be retained in federal ownership.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Sensitive Animal Species

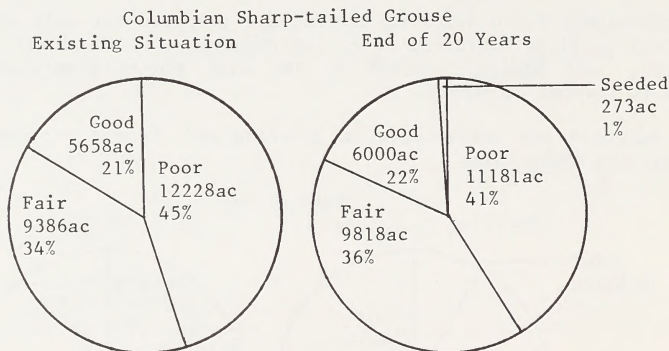
Columbian Sharp-tailed Grouse

The slight improvement in this habitat would occur in the northern regions of the resource area. Currently, 45% of the habitat is in poor condition. This is due mainly because of medusahead wildrye invasion. Due to reduced grazing pressure these areas would improve.

Approximately 250 acres of seedings are proposed in this habitat. The areas would have to be evaluated to assure that no seeding would destroy a dancing ground. The seedings should improve nesting and brood-rearing cover.

Approximately 4,200 acres in the Sage Creek allotment would be designated and managed as an ACEC. The Sage Creek allotment would be inventoried for vegetative production and livestock use adjustments would be pursued and monitored to benefit sharp-tailed grouse. Livestock use adjustments would improve sharp-tailed habitat and should stimulate population growth.

The acreages and percentages of existing and 20-year projected habitat conditions are shown below.



Long-billed Curlew

All proposed seedings in this alternative would have negative impacts on breeding curlews. The physical structure of most grass species is too high and dense to be used as nesting habitat.

Approximately 760 acres of curlew habitat is proposed for sale or exchange. These areas would be reviewed to evaluate any impacts on local curlew populations. Crucial habitat will be retained in federal ownership.

The proposed Long-billed Curlew ACEC would contain approximately 61,000 acres of public land. These lands would continue to be managed to provide nesting and breeding habitat for 1,000 pairs of breeding curlews.

Livestock

Under this alternative initial forage levels would start at 66,257 AUMs which is a small decrease from the present five year average license use of 66,424 AUMs. This decrease is due to existing land transfers and desert land entry applications currently being processed.

Over the long term (20 year projection) losses of 14,382 acres to land transfers out of federal ownership account for a reduction of 2,531 AUMs. An additional 162 AUMs would be lost to special designation, historic, and cultural withdrawals of 915 acres.

Further reductions to provide forage for big game winter and summer range account for an additional loss of 2,729 AUMs over the long term. In total, 5,422 AUMs would be lost under this alternative.

In the short term (5 years) with approximately 1,700 AUMs produced on 5,000 acres of seedings, the resulting available forage level would reach approximately 68,000 AUMs. This would be a 2% increase from the present five year average license use.

Over the long term seedings of 18,279 acres are expected to produce 6,097 AUMs. Installation of improvements (water systems, fencing) along with increased livestock management practices on approximately 66,800 acres of native range are expected to increase forage production an additional 3,433 AUMs. Total forage production is expected to reach 70,536 AUMs over the long term. This represents a 6% increase over the present five year average license use.

In the long term analysis of range improvements and land treatment, AUMs lost to transfers, special designation areas, and wildlife forage were considered removed prior to addition of new forage generated.

Impacts are allotment specific and resulting AUM levels are shown in Appendix F.

Trend information is not available at present. Monitoring studies will be used to adjust stocking levels on allotments. Twelve new allotment management plans will be established along with revising existing plans (where necessary) to increase livestock management and improve range conditions. On other allotments data presented in Appendix E will be used as baseline information in prioritizing management and monitoring efforts to improve range condition. Annual grass ranges (medusahead/cheatgrass) will receive high priority land treatment and/or livestock management efforts to restore perennial grasses.

Stock driveways would be eliminated on 22,237 acres, continued on 40,763 acres, and added on 627 acres for a total of 41,390 acres available.

Wild Horses

The West Crane wild horse herd would be removed from the West Crane Allotment.

The Four-Mile wild horse herd would be maintained at 20 head. The livestock AUM reduction of 424 AUMs for maintenance of range condition which has been in effect since 1977 would continue.

LANDS AND REALTY RESOURCES

Lands

Land transfer would consist of 563 acres for sale, 10,107 acres for sale or exchange, 6,374 acres for exchange, and 480 acres for Desert Land Entry for a total of 17,524 acres.

Of the lands identified for sale, 80 acres would be a sanitary landfill for Ada County, 320 acres for a sanitary landfill site for Canyon County, and 160 acres already under R&PP lease to the Parma Rod and Gun Club would be patented. The remaining three acres are scattered occupancy and agricultural trespass parcels that have been surveyed and lotted. Transfer of land by sale would generate approximately \$38,000 based on a current appraisal for the 80 acres to be sold to Ada County, estimates of the value for the 320 acre parcel to Canyon County, the small parcels that total 3 acres, and the 160 acres for the Parma Rod and Gun Club.

The lands proposed for transfer by sale or exchange are generally small isolated parcels that are difficult and uneconomic to manage. Their disposal would reduce problem management areas and consolidate land ownership patterns, thereby improving management and reducing management costs. The larger parcels would be examined for exchange possibilities before sale is considered.

There are three exchange proposals pending in the resource area being considered by this plan. They are referred to as the Brownlee, Little and Henggeler exchanges. The Brownlee exchange is a State proposal to acquire 6,251 acres of public land for 6,171 acres of State land. The exchange would consolidate State and public lands and would improve management efficiency for both governments.

The Little exchange is a private proposal to acquire 120 acres of public land for 160 acres of private land. The offered private land is identified for acquisition in the Boise Front MFP to facilitate watershed and grazing management. Action on this proposal has been initiated and will continue through development of this RMP.

The Henggeler proposal is to exchange 14 acres of private land for 83 acres of public land. The 80 acre parcel selected is in the curlew area and will be retained. Another parcel may be selected from the proposed sale or exchange lands or from lands proposed for disposal under DLE that are relinquished or rejected. The acquisition of the private land would provide access to the Snake River in an area with virtually no public access and would place the remainder of Crow Island in public ownership.

Land transfer for agricultural use (Desert Land Entry) would result in a few additional trespass cases, but because of the limited number of acres to be transferred under this category, it would not be a significant increase. The average administrative cost for a trespass case is \$1,250, resulting in increased costs of approximately \$2,500 on an estimated two trespass cases.

Rights-of-Ways

Overhead, surface and/or subsurface rights-of-way would be restricted on 6,696 acres of public land due to conflicts with candidate or sensitive plants, significant cultural or recreation sites. The areas precluded or restricted are generally small acreages and there would be few conflicts with major utility rights-of-way since rights-of-way could be rerouted slightly to avoid these areas. Hydroelectric development would be precluded on 8 miles of the South Fork Payette River.

Withdrawals

Of the lands presently withdrawn for livestock driveways (approximately 63,000 acres), 22,237 acres would be revoked from the withdrawals, 40,763 would continue, and 627 acres would be added.

There is only one C&MU classification in the resource area encompassing 37.31 acres. This parcel was acquired under a Section 8 (Taylor Grazing Act) exchange. When the order opening the lands to the administration of the public land laws was published, a C&MU classification was placed on it

at the same time, precluding disposal. This parcel contains no unique resources and revoking the classification would put it in the same status of general retention as the other public lands adjacent to it.

Additional withdrawals may be forthcoming if Congress designates the Payette River as a Wild and Scenic River. The final acreage withdrawn may be more or less than that proposed in this plan.

CULTURAL AND PALEONTOLOGIC RESOURCES

Cultural Resources

Cultural resource sites in critical need of special management (Grey's Creek, Indian Creek, Milk Creek, Cabin Creek, Mineral, Quartzburg, Centerville and Placerville) would continue to be protected by BLM standard operating procedures and would receive additional protection through nomination and acceptance to the National Register of Historic Places (NRHP). The effects of livestock trampling would be mitigated through the installation of protective fencing and the effects of erosion would be diminished by the removal of livestock from the immediate site area, and the improvement of riparian habitat.

Cultural Resource Management Plans (CRMP) prepared for these sites will detail additional inventory needs and monitoring schedules to determine the rate of deterioration, impacts of vandalism, etc.

Paleontologic Resources

The impacts from this alternative can not be fully analyzed since the paleontologic inventory for the resource area is not complete. The greatest possible impacts would be on the 17,524 acres proposed for transfer from federal ownership. Even with paleontologic clearances, unknown scientifically significant fossils could be lost or destroyed or closed off from scientific study.

RECREATION RESOURCES

Recreation

Based on the State Comprehensive Outdoor Recreation Plan (1983) data, the overall demand for recreation opportunities in the Cascade Resource Area is expected to increase 54-78% by the year 2000. This would result in demand increasing from the current 622,000 activity occasions to approximately 1,034,000 activity occasions. These increases are expected to occur primarily due to increased population and leisure time and should occur regardless of the alternative chosen in the RMP process. The location and relative mix of recreational activities would vary somewhat between alternatives, but overall demand throughout the Cascade Resource Area would be unaffected by any of the alternatives.

There would be 257,623 acres open to unrestricted ORV use (except competitive races) 227,895 acres limited and 1,948 acres closed to ORV use. Most of the limited use areas fall into the "high erosion hazard" (HEH) category of soils and topography. The limited areas include the following

acreages: Boise Front SRMA (11,995), Oxbow-Brownlee (39,779), Payette River Corridor (18,984), Black Canyon Planning Unit (65,000), sharp-tailed grouse ACEC (4,200), identified cultural sites (2,020), developed recreation sites (12), and candidate and sensitive plant sites (920). The remaining limited acres fall into the "high erosion hazard" (HEH) category.

The closed areas include the following acreages: research natural areas and/or candidate and sensitive plant sites (1,365), developed recreation sites (31), Silica Sands area (40), and the Clay Peak Motorcycle Park buffer zone (512).

ORV use in the Boise Front SRMA is currently limited to designated roads and trails. Giving this area ACEC status would not effect this designation. Rehabilitation of the approximately 10 miles of currently closed roads and trails on the Boise Front might be expected to decrease unauthorized ORV use by as much as 15-20% (BLM lands only), with proportionate improvements in the visual and aesthetic qualities and watershed integrity.

Impacts on ORV recreation by limiting use in the Oxbow-Brownlee and Payette River Corridor SRMAs, cultural sites, recreation sites, the sharp-tailed grouse ACEC and most T&E sites are expected to be minimal as very little use off roads and trails in these areas is occurring now or is expected to occur in the near future (snowmobiles excepted). However, the transfer (T1) of 320 acres in the Pickles Butte ORV play area would reduce the play area to 180 acres of public lands. ORV use would most likely continue on the transferred lands until the County started landfill activity. As the landfill areas become reclaimed, ORV activity would most likely be displaced.

Limitations on 65,000 acres of public land in the Black Canyon Planning Unit are currently in effect with apparently minimal impact on recreational ORV use.

Limiting 900 acres in the Little Gem Cycle Park can be accomplished by rerouting existing trails so that ORV use will not be impacted.

An annual seasonal closure of approximately four miles of roads and trails for Boise Front winter deer habitat is currently in effect with apparently minimal impact to recreational ORV use.

Impacts on ORV recreation by closing 1,950 acres of developed recreation sites, T&E sites, research natural areas and a buffer zone are expected to be minimal as very little or no ORV use is occurring in these areas now or expected to occur in the near future.

A projected increase in big game numbers (deer-33%, elk-22%) through improved habitat is expected to increase big game hunting opportunity by the same amount. Opportunities for nonconsumptive uses would also increase.

Construction of 40 miles of timber harvest access roads (2 miles annually for 20 years) would increase recreational access into these areas on those roads that would remain open for timber management purposes.

Lands available for dispersed recreation would be reduced by the 17,524 acres identified for disposal.

Eight miles and a 2,600 acre corridor of BLM land along the South Fork of the Payette River will be proposed for Wild and Scenic Rivers study. This includes 1,240 acres of commercial forest land within the corridor.

The Box Creek WSA (440 acres) will be managed under wilderness IMP guidelines pending Congressional action. Under IMP, ORV use in the area will be designated as "limited to existing roads and trails." As there are no existing roads and trails in the area, and minor recreational use occurring within the area, the effects of this action would be negligible. If Congress does not designate the WSA as wilderness, no other special designation of the area will be considered.

Visual

More intensive management of the Boise Front SRMA (12,000 acres) could result in positive effects in the visual resource of the area by as much as 10-15%.

Improved riparian habitat on 155 miles of rivers and streams would improve the visual resource in these locations.

Harvesting 1.0 MMBF of timber, and resulting access roads, may negatively impact the visual resource. Less obtrusive selective cutting will be the primary harvest method, although some clearcuts (not to exceed 40 acres each) may be proposed. All timber sales will be examined for visual impacts on a case-by-case basis.

Increased wildlife improvement projects could negatively impact the visual resource. Thirty miles of new fences are planned, as well as approximately 15,600 acres of shrub planting. With the use of standard mitigation measures on these projects, no significant adverse impacts are expected.

Project development in the range program could negatively impact the visual resource. Pipelines will be constructed using a ripper to bury the pipe, thus minimizing the adverse impacts. Other range developments should not adversely impact visual quality because the standard operating procedures for construction are expected to effectively mitigate potential impacts. Land treatments that are designed with feathered edges, multiple species seed mixtures and other mitigation measures should not cause significant adverse impacts.

Transferring 17,524 acres of land from public ownership could result in impacts to the visual resource. Acres transferred from federal ownership by sale or exchange, would no longer be under BLM control and visual quality would depend upon the management implemented by the new owner. Example: agricultural development would transform the areas' scenic views from one of sagebrush/grass dominance to one dominated by cropland and farming. The visual quality of transferred land that is maintained primarily for grazing purposes would not change significantly from present conditions.

MINERAL RESOURCES

Leasables

Oil and Gas

Approximately 100,000 acres of BLM land within this resource area have been classified as prospectively valuable for oil and gas. Considering a 12 month availability 1,200,000 acre/months of access exist. About 19,000 acres would continue to be affected by crucial deer winter range stipulations (closed 12/1 to 4/30) and 5,000 acres would continue to be closed from 2/15 to 6/30 to protect bird nesting and breeding areas. This would be a total protective closure of 117,500 acre months or approximately 10% of the available access. Since weather and soil conditions normally do not allow off-road activities before 4/15 each year the impact from the stipulations would not be significant.

The "no surface occupancy" stipulations under this alternative total 2,330 acres. The lands involved are generally small and outside of the lands identified as prospectively valuable for oil and gas. The impacts on the availability of lands for oil or gas leasing and development is therefore insignificant.

Since the lands identified for transfer would have oil and gas reserved in areas classified as prospectively valuable for oil and gas, the impact of land transfers would be insignificant.

Based on the lack of any commercial oil or gas wells in Idaho, the 35 dry holes in the resource area, the low potential of the area, and the above analysis, the overall impacts of oil or gas leasing and development would be insignificant.

Geothermal

Approximately 94% of the resource area would remain open for leasing under this alternative. The areas closed to geothermal leasing would be the existing 31,177 acres of withdrawn lands. Impacts from time stipulations would not be significant because the periods of closure generally match the period that has poor weather and soil conditions which limit access.

The "no surface occupancy" stipulations under this alternative total 2,330 acres. The lands involved are generally small parcels and represent a very small percentage of the total prospectively valuable area.

Although various lands within the resource area have been classified as prospectively valuable for geothermal resources, the only KGRA within the area has been declassified and there are no geothermal leases within the whole resource area.

Based on the lack of any commercial geothermal electric projects in Idaho, the lack of any known large reservoirs in the area, the declining interest in geothermal resources and the above analysis, the overall impacts on the availability of geothermal leases and development would be insignificant.

Locatables

The resource area would have 94% of its lands open to mining activity. Those areas closed to mining would be the existing withdrawals of 31,177 acres.

A total of 17,524 acres of land are proposed for transfer from federal ownership under this alternative. No lands having valid mining claims or mineral potential would be transferred from federal ownership unless they are patented under the mining laws, the mineral estate is purchased at fair market value, or lands of equal overall values are obtained. The impact from land transfer on the availability of lands for mineral location and development would, therefore, be considered insignificant.

An analysis of the location of and activity on the existing mining claims and areas of mineral interest compared to an analysis of the actions proposed under this alternative indicates that there would not be any significant impacts on the availability of locatable minerals.

Salables

Mineral Materials

Mineral material needs within the resource area have not been very high except in the Weiser area. No increase in need or decrease in overall availability would result from the actions under this alternative. Some existing pits will, however, be depleted within the timespan of this plan.

The impacts from this alternative on mineral material resources would be insignificant.

FOREST RESOURCES

Timber

The total acres of commercial forest land would be reduced by 23 CFL set aside acres to 26,663 acres.

The impacts of losing this 23 acres of commercial forest land acres would be minimal. The annual allowable cut would be 1.0 million board feet.

FIRE MANAGEMENT

The fire occurrence in the Cascade Resource Area is approximately 40 fires per year with a size of about 221 acres per fire per year. Agricultural development, or transfer acreages, about 3-4% of the total acreages, would gradually increase the number of fires and the cost of fire suppression. Fire management costs would increase approximately 3% to \$112,000 per year in this alternative.

This would be a gradual reduction in the annual acreage of wildfires burned, because of the effects of fuel breaks, and because of rehabilitation and greenstripping effects, including reseeding of fire resistance species,

which would retard or reduce the larger fires. Refer to Resource Management Guidelines for Fire.

ECONOMICS

Crop Agriculture

With this alternative there would be 480 acres of agricultural development. The total from land sales would be \$465,100.

This level of annual sales would generate direct earnings of \$178,100. This would represent 0.2% of the RMP area farm earnings. The total earnings that would be generated, including interindustry interactions and household spending (the multiplier effect) would be \$454,000. This would be 0.02% of the total RMP area 1983 earnings.

The direct earnings would lead to a gain in farm employment of 6 jobs. This would be 0.2% of the 1983 farm wage and salary employment. The total earnings gain would lead to an increase of 21 jobs. This would be 0.02% of the RMP area 1983 wage and salary employment.

Livestock

The initial livestock forage level would be 66,307 AUMs. This would support 5,526 animal units which would generate earnings of \$2.7 million. This would be 11% of the total permittee earnings, 6% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$7.2 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 96 jobs. This would be 2.8% of the 1983 farm wage and salary employment. The total earnings would generate 333 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This initial stocking level represents a capital value of between \$3.7 and \$16.6 million.

The 20-year livestock forage level would be 70,538 AUMs. This would support 5,878 animal units which would generate earnings of \$2.9 million. This would be 11% of total permittee earnings, 7% of the RMP area meat animal earnings, and 3% of total farm earnings. The total earnings (including the multiplier effect) would be \$7.7 million. This would be 0.3% of total RMP area 1983 earnings.

The direct earnings would generate 104 jobs. This would be 3% of the 1983 farm wage and salary employment. The total earnings would generate 357 jobs. This would be 0.3% of the RMP area 1983 wage and salary employment.

This 20-year stocking level represents a capital value of between \$3.9 and \$17.6 million.

Recreation

Impacts would be the same as for Alternative A.

Environmental Consequences

Lumber and Wood Products

Impacts would be the same as for Alternative A.

Management Costs

Range and wildlife improvements associated with this alternative would cost approximately \$1.8 million.

Summary

Total crop agriculture earnings and employment would increase by \$454,000 and 21 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. The initial livestock stocking level would lead to earnings and employment (including the multiplier effect) of \$7.2 million and 333 jobs. These are both less than one-half of one percent of the RMP earnings and employment. The 20-year stocking level would lead to total earnings of \$7.7 million and employment of 357 jobs. This alternative would not lead to any change in the recreation-related earnings and employment. The total (including the multiplier effect) lumber and wood products earnings and employment would be \$515,000 and 26 jobs. These are both less than one-tenth of one percent of the 1983 RMP area earnings and employment. Project costs needed to implement this alternative would be \$1.8 million.

SHORT TERM USE VERSUS LONG-TERM PRODUCTIVITY

The short-term uses of man's environment are described for each alternative in Chapter 2. The relationship of these short-term uses to long-term productivity for various resources is discussed in Chapter 4. The environmental consequences presented in Chapter 4 show that a difference in long-term productivity would be expected from one alternative to another. A comparative summary of the environmental consequences for each alternative is presented in Chapter 2.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Implementation of any of the alternatives would limit potential future uses of the land and resources to some extent. Irreversible and irretrievable commitments of resources occur when future options are foreclosed or resource values lost.

The Preferred Alternative (Alternative E) would result in the following irreversible or irretrievable commitments of resources:

An irretrievable loss of soil would occur on 480 acres of lands put into agricultural production.

Wildlife habitat could be modified on up to 17,524 acres of transferred lands converted to other uses. Species most affected include elk, mule deer, sage grouse, and long-billed curlew. These areas would be committed for the foreseeable future.

Approximately 2,531 AUMs of grazing use lost from conversion of transferred lands to other uses would be lost for the foreseeable future.

CHAPTER 5

CONSULTATION AND COORDINATION

The Cascade Resource Management Plan/Environmental Impact Statement (RMP/EIS) was prepared by an interdisciplinary team with expertise in range management, wildlife, recreation, lands, economics, soils, forestry, watershed, cultural resources, minerals, and fire management. The list of preparers is at the end of this chapter.

The planning process began in November 1983 with issue identification and the other steps of the planning process. Consultation and coordination with agencies, organizations, and individuals occurred in a variety of ways throughout the planning process. A special effort has been made to ensure that the alternatives are consistent with approved plans of local and state government. The following is a summary of the public participation and in-house coordination which occurred during preparation of the Cascade RMP/EIS.

Issue Identification and Inventory Stage

| | |
|---------------------|--|
| November 25, 1983 | Notice of Intent to prepare Resource Management Plan (RMP) published in Federal Register. |
| January 26, 1984 | RMP mailout sent to 435 agencies, organizations, groups, and individuals announcing the beginning of the planning process and soliciting the identification of issues and planning criteria. Approximately 93 people responded by prioritizing and identifying issues. |
| February 6-29, 1984 | Held meetings in Cambridge, Emmett, Payette, Weiser, Boise and Caldwell for issue identification. |
| March 12-23, 1984 | District Office Staff meetings - analyzed results of issue and criteria identification process from mailouts and six public meetings. |
| September 17, 1984 | RMP mailout and news release issued to announce results of public input. |
| November 26, 1985 | State Director briefing on Alternatives. |
| November 30, 1985 | State Office Coordination meeting on update policy for RMP. |

The Draft RMP/EIS was sent to the following individuals and organizations. This list is representative but not inclusive.

Elected Officials

Federal:

Senator James McClure
Senator Steve Symms
Congressman Larry Craig
Congressman Richard Stallings

State:

Governor John Evans
Senator James Risch
Senator Walt Yarbrough
Representative Gerry Montgomery
Representative Lyman Winchester

Local:

Affected Cities and Counties

Federal Agencies

Department of Agriculture:

U.S. Forest Service
U.S. Soil Conservation Service

Department of Defense:

U.S. Air Force
Idaho National Guard

Department of Energy:

Bonneville Power Administration
Federal Energy Regulatory Commission

Department of the Interior:

National Park Service
U.S. Bureau of Indian Affairs
U.S. Bureau of Reclamation
U.S. Bureau of Mines
U.S. Fish and Wildlife Service
U.S. Geological Survey

Department of Transportation:

Federal Aviation Administration

Environmental Protection Agency

State Agencies, Commissions or Boards

Idaho Department of Agriculture
Idaho Department of Fish and Game
Idaho Department of Health, Welfare and Environmental Services
Idaho Department of Lands
Idaho Department of Parks and Recreation
Idaho Department of Water Resources
Idaho Public Utilities Commission
Idaho State Historic Preservation Office
Idaho Outfitters and Guides Board
Office of the Governor

Advisory Councils

Boise District Multiple Use Advisory Council
Boise District Grazing Advisory Board

Organizations

Ada County Fish and Game League
Appaloosa Horse Club
American Fisheries Society
American Wilderness Alliance
Association of Idaho Cities
Association of Western Native Plant Societies
Audubon Society
Boise Chamber of Commerce
BSU Conservation Group
Caldwell Chamber of Commerce
Committee for Idaho's High Desert
Desert Bighorn Sheep Council
Desert Fishes Council
Desert Raiders
Desert Rats
Desert Research Institute
Desert Tortoise Council
Eagle Valley Environmentalists, Inc.
Earth First
Federation of Western Outdoor Clubs
Friends of the Earth
Gem County Rock and Mineral Society
Good Sam Club
Idaho Archaeological Society
Idaho Association of Counties
Idaho Carey Act Association
Idaho Cattlemen's Association
Idaho Conservation League
Idaho Environmental Council
Idaho Historical Society
Idaho Mining Association
Idaho Museum of Natural History
Idaho Native Plant Society
Idaho Natural Areas Coordinating Committee
Idaho Outdoor Association
Idaho Outfitters and Guides Association
Idaho Petroleum Council
Idaho Rare Birds Committee
Idaho State Grange
Idaho Trail Machine Association
Idaho Whitewater Association
Idaho Wildlife Federation
Idaho Woolgrowers Association
Institute for High Desert Studies
League of Women Voters
National Council of Public Land Users
National Public Land Advisory Council

National Public Lands Task Force
National Rifle Association of America
National Wildlife Federation
Natural Resource Defense Council
Nature Conservancy
Northwest Mining Association
Oregon Wilderness Coalition
Owyhee Cattlemen's Association
Pacific League Foundation
Pacific Northwest 4-Wheel Drive Association
Public Lands Council
Sagebrush Rebellion, Inc.
Sierra Club
Snake River Audubon Society
Snake River Gem Club
Society for Range Management
Treasure Valley Club
Treasure Valley Rock and Gem Club
United 4 Wheel Drive Association
Wilderness Institute
Wilderness Society
Wildlife Management Institute
Wildlife Society
Wildlife Research Institute

Concerned or Affected Individuals, Companies, Businesses, and Schools

ARCO
Noranda Exploration, Inc.
Rivers Odysseys West
Salmon River Kayaks
Cascade Raft Company
TEXACO
Affected grazing permittees
Other businesses and industries
Colleges and universities
Desert Land Entry applicants
Other individuals

LIST OF PREPARERS

| Name | Responsibility | Education | Experience |
|-------------------|--|---|--|
| Delores Blom | Lands | Business Major - Boise State University | 9 yr; Realty Specialist-BLM |
| George Farrow | Recreation, Visual | B.S. Resource Management - Oregon State University Post Graduate - Idaho State University | 2 yr, Timber Management-USFS 5 yr, Fire Management-BLM 7 yr, Outdoor Recreation Planner-BLM |
| Stan Frazier | Economics | B.S. Agricultural Economics - Oregon State University | 11 yr, Economist-BLM |
| Richard Geier | Project Leader/Cascade Area Manager | B.S. Forestry - University of Maine | 1 yr, Forester-BIA 8 yr, Forester-BLM 16 yr, Outdoor Recreation Planner-BLM 3 yr, Area Manager-BLM |
| Ed Gheen | Livestock, Wild Horses | B.S. Wildlife Management - University of Idaho | 3 yr, Fisheries Technician-Alaska Dep't. of Fish & Game 6 yr, Range Conservationist-BLM 6 yr, District Wildlife Biologist-BLM 2 yr, Wildlife Biologist-BLM, S.D. 4 yr, Fisheries/Wildlife Biologist-BLM 1 yr, Range Conservationist-BLM |
| Galen Green | Fire Management | B.S. Range & Forest Mgm't. - Colorado State University | 9 yr, Forester-BLM 3 yr, Fire Ecologist-BLM |
| Bill Hagdorn | Planning Coordinator | B.S. Natural Science, M.S. Resource Development - Michigan State University Post Grad. Forestry & Environmental Planning - Oregon State University | 2 yr, Outdoor Rec. Planner/Community Planner-Minnesota Dep't. of Natural Resources/State Planning 10 yr, Planning Bureau Chief-Idaho Parks & Recreation Department 1 yr, Instructor-Oregon State University 4 yr, Planning Coordinator-BLM |
| Jim Jones | Forestry | B.S. Forest Management - Washington State University | 16 yr, Forester-BLM |
| Sam Mattise | Wildlife | B.S. Wildlife Biology - Panhandle State University M.S. Wildlife Biology - South Dakota State University | 8 yr, Wildlife Biologist-BLM |
| Fred Minckler | Team Leader | B.S. Fishery Management, B.S. Wildlife Management - Utah State University | 1 yr, Recreation/Forestry Technician-BLM 1 yr, Soil Conservation Technician-SCS 4 yr, Fisheries Biologist-NMFS 2 yr, Fisheries Biologist-BLM 6 yr, Environmental Coordinator-BLM |
| Pat Olmstead | Water Quality, Aquatic Habitat, Riparian Habitat | B.S. Fishery Biology - Michigan State University | 5 yr, Aquatic Habitat Biologist-BLM 4 yr, Fisheries Biologist-BLM |
| Roger Rosentreter | Threatened and Endangered Plants | B.A. Botany - University of Montana M.A. Biology - Clark Univ. Ph.D. Botany - University of Montana | 6 yr, Seasonal Range Technician-BLM 1 yr, Botanist-BLM |
| Bill Rush | ADP, Remote Sensing, Geographic Information Systems | B.S. Wildland Recreation Management - University of Idaho | 4 yr, Forestry Technician-USFS 3 yr, Forester-BLM 4 yr, Natural Resource Specialist-BLM |
| Paul Seronko | Soils, Air, Vegetation | B.S. Soil Science - University of Wisconsin | 2 yr, Soil Specialist-Wyoming State 6 yr, Soil Scientist-BLM |
| Ted Weasma | Mineral & Energy Resources/Paleontological Resources | B.S. Geology - University of Washington | 2 yr, Civil Engineering Technician-USFS 1 yr, Cascade Testing Field Geologist 1 yr, Drill Inspector-USFS 5 yr, Geologist-BLM |
| Jack Young | Cultural Resources | B.A. Inter-American Studies - University of Texas-El Paso M.A. Anthropology - Catholic University of America | 5 yr, Resource Inventory Team Archaeologist-BLM 4 yr, Resource Area Archaeologist-BLM |

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GLOSSARY

ACRONYMS

ACEC - Area of Critical Environmental Concern
AMP - Allotment Management Plans
AUM - Animal Unit Month
BLM - Bureau of Land Management
CFL - Commercial Forest Land
CRA - Cascade Resource Area
CRMP - Coordinated Resource Management Plan
CRMP - Cultural Resource Management Plan
DEIS - Draft Environmental Impact Statement
DLE - Desert Land Entry
EA - Environmental Assessment
ERMA - Extensive Recreation Management Area
FLPMA - Federal Land Policy and Management Act of 1976
GEM - Geology, Energy, and Minerals
IMP - Interim Management Plan
KGRA - Known Geothermal Resource Area
MIC - Maintain, Improve, Custodial
MFP - Management Framework Plan
MMBF - million board feet
MUA - Multiple Use Area
NEPA - National Environmental Policy Act of 1969
ONA - Outstanding Natural Area
ORV - Off Road Vehicle
RA - Resource Area
RAMP - Recreation Area Management Plan
RMP - Resource Management Plan
RNA - Research Natural Area
ROS - Recreation Opportunity Spectrum
ROWs - Rights-of-Ways
RPP - Recreation and Public Purpose Act
SCORP - State Comprehensive Outdoor Recreation Plan
SHPO - State Historic Preservation Officer
SOP - Standard Operating Procedures
SRMA - Special Recreation Management Area
TMP - Timber Management Plan
TPCC - Timber Production Capability Classification
USFS - United States Forest Service
VRM - Visual Resource Management
WHMP - Wild Horse Management Plan
WSA - Wilderness Study Area

ACTIVE GRAZING PREFERENCE. That portion of the grazing preference that could be licensed and used should the livestock operator desire.

ACTIVITY OCCASION. A standard unit of recreation use consisting of one individual participating in one recreation activity during any reasonable portion, or all, of any one day.

ACTUAL LIVESTOCK USE. The use (in AUMs) made of forage on an area without reference to permitted or recommended use.

ALLOTMENT. An area designated for use by a prescribed number of livestock.

ALLOTMENT MANAGEMENT PLAN (AMP). A documented program which applies to livestock operations on the public lands and which is prepared in careful and considered consultation, cooperation, and coordination with the permittee(s) or lessee(s) and others involved. It prescribes the manner in and extent to which livestock operations will be conducted in order to meet the multiple use and sustained yield objectives as determined in the resource management plan.

ANIMAL UNIT MONTH (AUM). The amount of forage (800 lb. dry weight) required to sustain the equivalent of 1 cow, 1 horse, 5 sheep, 5.3 deer, or 9.4 antelope for one month.

AVERAGE LICENSED GRAZING USE (five year average use). The arithmetic mean (average of authorized (or licensed) grazing in AUMs) over a particular time period.

BEA. Bureau of Economic Analysis, U.S. Department of Commerce.

BU. Bushel, a unit of dry measure.

CANDIDATE SPECIES. Species with insufficient biological information on hand to support listing by the U.S. Fish and Wildlife Service as either threatened or endangered.

CAPITAL VALUE. The value at which assets (grazing privileges) can be sold. Market value.

CARRYING CAPACITY. The maximum use rate possible without inducing damage to vegetation or related resources. Carrying capacity relates to livestock numbers, wildlife numbers, recreational use, etc.

CLASS II CULTURAL RESOURCE INVENTORY. A sample-oriented field inventory designed to locate and record, from surface and exposed profile indications, all cultural resource sites within a portion of a defined area in a manner which will allow an objective estimate of the nature and distribution of cultural resources in the entire defined area.

CLASS III CULTURAL RESOURCE INVENTORY. A complete inspection of all areas of potential impact from project implementation.

CLEAN AIR ACT. A series of Congressional acts and amendments requiring the establishment of air quality standards and national standards for air pollution control. The general intent is to "protect and enhance the quality of the Nation's air resource."

CLIMAX PLANT COMMUNITY. The culminating stage in plant succession after a series of successive vegetation stages and has reached a highly stable condition.

C&MU. The Classification and Multiple Use Act of 1964 which specified that public lands would not be available for entry under various land laws (DLE/CA) within a certain legally described area.

CONDITION.

- Ecological Condition. The present state of the vegetation on a range site in relation to the climax (natural potential) plant community for that site.
- Range Condition. Synonymous with ecological condition.
- Seeding Condition. The amount and productivity of seeded species measured in terms of maximizing production of forage for livestock. Considers the amount of reinvading shrub species in the treatment area.

COORDINATED RESOURCE MANAGEMENT PLAN (CRMP). A plan developed cooperatively by appropriate State and Federal agencies to formulate a resource management program that integrates and makes provision for all resource values and uses within the selected geographical area.

CRUCIAL HABITAT. Habitat which is absolutely basic to maintaining viable populations of fish, wildlife, or plants during certain seasons of the year or specific reproduction periods.

CULTURAL RESOURCE CLEARANCE. A statement by a competent professional historian or archaeologist as to whether or not any known cultural resources will be adversely affected by an undertaking and requires that such a statement be based on the results of an appropriate investigation directed at determining if and where cultural resources exist in the vicinity of an undertaking.

CULTURAL RESOURCE SITE. A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites which are recorded as cultural resources have sociocultural or scientific values and meet the general criterion of being more than 50 years old.

CWT. Hundred weight, a unit of weight measure equal to 100 pounds.

DESERT LAND ACT/ENTRY. Passed in 1877 and subsequently amended, this Act allows a state resident to file a patent application on up to 320 acres of public land with the intent of developing said land for cultivated agriculture.

DEVELOPED RECREATION SITE. See Recreation.

DISPERSED RECREATION. See Recreation.

DISTANCE ZONE. The area that can be seen from a travel route as foreground-middleground (up to 15 miles), and areas which are seldom seen.

ECOLOGICAL CONDITION. See Condition.

ENDANGERED SPECIES. Any animal/plant species in danger of extinction throughout all or a significant portion of this range.

ENVIRONMENTAL ASSESSMENT (EA). A concise public document prepared to provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact. It includes a brief discussion of the need for the proposal, alternatives considered, environmental impact of the proposed action and alternatives, and a list of agencies and persons consulted.

ERODIBILITY. Susceptibility of soil to erosion.

FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA). Public Law 94-579 signed by the President on October 21, 1976. Establishes public land policy for management of lands administered by the Bureau of Land Management. FLPMA specifies several key directions for the Bureau, notably that: management be on the basis of multiple use and sustained yield; land use plans be prepared to guide management actions; public lands be managed for the protection, development, and enhancement of resources; public lands be retained in Federal ownership; and public participation be utilized in reaching management decisions.

FIRE MANAGEMENT. The protection and enhancement of the resources of the public lands through use of fire as a management tool.

- Full Suppression. Immediate aggressive action is taken on all new fires on or threatening public lands.
- Limited Suppression. A policy that considers areas where fire control is extremely difficult or where the values threatened do not warrant the expenses associated with maximum suppression procedures.
- Prescribed or Prescription Burning. Fires burning under conditions that have previously been determined to be beneficial and that meet land management objectives.

43 CFR 3809. Regulations which provide for mineral entry, exploration, location, operations, and purchase pursuant to the mining laws and in a manner that will assume that unnecessary and undue degradation do not occur and that protection is afforded nonmineral resources. It also provides for reclamation of disturbed areas. These regulations pertain to locatable minerals only.

FULL SUPPRESSION. See Fire Management.

GRAZING PREFERENCE. The total number of animal unit months of livestock on public lands apportioned and attached to base property owned or controlled by a permittee or lessee.

GRAZING SYSTEMS. Systematic sequences of grazing use and non-use of an allotment to reach or maintain identified multiple-use goals or objectives by improving or maintaining the quality and quantity of the vegetation.

HABITAT MANAGEMENT PLAN (HMP). A written and approved activity plan for a geographical area of public lands which identifies wildlife habitat management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decisions.

INFILTRATION RATE. The rate at which water enters the surface soil.

INTRUSION. A feature (land and water form, vegetation, or structure) which is generally considered out of context because of excessive contrast and disharmony with the characteristic landscape.

KNOWN GEOTHERMAL RESOURCE AREA (KGRA). An area in which the geology, nearby discoveries, competitive interests and other indicia would in the opinion of the Secretary (of the Interior) have high prospects for extraction of geothermal steam or associated geothermal resources.

LAND REPORT. A written report that documents the physical, environmental, social, and economic factors used in making land use decisions on all lands or rights-of-way actions.

LEASABLE MINERALS. See Minerals.

LIMITED SUPPRESSION. See Fire Management.

LOCATABLE MINERALS. See Minerals.

MANAGEMENT FRAMEWORK PLAN (MFP). A planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of the FLPMA, which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, and objectives to be achieved for each class of land-use or protection. Until replaced by RMP's, MFP's, including those completed in the transition period, are used as a basis for management action as provided for in 43 CFR 1610.8.

MINERALS.

- Leasables. Types of minerals, such as coal, oil, oil shale, gas, phosphate, sodium, potash, and geothermal resources, whose prospecting and development on public lands under permit or lease was authorized by the Minerals Leasing Act of 1920, as amended and supplemented.
- Locatables. Precious or semi-precious minerals that are not considered to be common variety minerals. Locatable mineral deposits can be claimed and the mining claim patented, thus converting it to private ownership. These minerals are covered by the Mining Law of 1872.
- Salables. Mineral materials such as common varieties of sand, stone, gravel, cinders, pumice, pumicite, and clay that may be acquired under the Materials Act of 1947, as amended.

MINING LAW OF 1872. An act which authorized placer and lode mining claims, mill sites, and tunnel sites of specific dimensions. Requires \$100 worth of work be done on each claim every year.

MITIGATING MEASURES. Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

MONITORING. The collection and analysis of data to evaluate rangeland resources on specific areas to determine the effectiveness of actions in meeting management objectives.

MULTIPLE USE. The management of all the resources of the public lands so that they are utilized in the combination that will best meet the needs of the American people.

NATIONAL ENVIRONMENTAL POLICY ACT OF 1969. A Congressional Act which establishes a national environmental policy. The goal of the act is to improve the quality of the human environment by procedurally requiring all Federal agencies to give equal and complete consideration to environmental values in all their decision making activities.

NATIONAL REGISTER OF HISTORIC PLACES. The official list, established by the Historic Preservation Act of 1966, of the Nation's cultural resources worthy of preservation. The Register lists archaeological, historic, and architectural properties (i.e., districts, sites, buildings, structures, and objects) nominated for their local, State, or national significance by State and/or Federal agencies and approved by the National Register staff. The Register is maintained by the National Park Service.

NESTING/BROOD-REARING AREAS (HABITAT). Localized areas used by some species of the grouse family for nesting and raising of young chicks (broods).

NORMALIZED CROP PRICE. A five-year weighted average of crop prices. Used in economic analysis of farm projects to account for the wide variation in prices that are common to agricultural products.

NOTICE OF INTENT. Required under 43 CFR 3809. When surface disturbance of five acres or less per year at a mining operation will occur, a written notice must be sent to BLM 15 days prior to starting the operation. The notice describes the operation and its location and must contain a statement that the lands will be reclaimed to the standards spelled out in the regulations.

ORDER 3 SOIL SURVEY. A low intensity or scale of soil mapping. In mapping soil landscapes, soil mapping unit lines are drawn as nearly as possible to the natural landscape. Resulting soil mapping units are, therefore, relatively large (generally 40 plus acres) and made up of various soil series, associations, and complexes.

OUTSTANDING NATURAL AREA (ONA). Areas of outstanding scenic quality, natural wonder, or scientific importance that merit special attention and care in management to insure their preservation in their natural condition.

PLAN OF OPERATION. Required by 43 CFR 3809 for mining operations where surface disturbance will exceed five acres per year or where operations are proposed in specially designated areas (wild and scenic rivers, ACECs, wilderness areas, areas closed to or with restricted ORV access, or areas withdrawn from mining where valid existing rights are being exercised). The plan must describe the entire operation including equipment, location of access, support facilities, drill sites, measures to prevent unnecessary or undue degradation, and reclamation plans. The plan of operation must be approved by the BLM authorized officer.

PLANT SUCCESSION. The process of vegetational development whereby an area becomes successively occupied by different plant communities of higher ecological order.

PREFERRED ALTERNATIVE. The plant alternative which management has initially selected as offering the most acceptable resolution of the planning issues and management concerns.

PRESCRIBED OR PRESCRIPTION BURNING. See Fire Management.

RANCH CONSOLIDATION. The merger of two or more ranching operations.

RANGE CONDITION. See Condition.

RECLAMATION STIPULATIONS. Special conditions included in mineral leases, permits, plans of operations, etc., which require that reasonable measures be taken to prevent unnecessary or undue degradation of the public lands, including resloping land disturbed by operation to an appropriate contour and, where necessary, revegetating disturbed areas.

RECREATION.

- Developed Recreation Sites. Distinctly defined area where facilities are provided for concentrated public use, e.g., campgrounds, picnic areas, and boat launches.
- Dispersed Recreation. Recreation of various kinds that occurs generally throughout a large area and is not confined to a specific place, e.g., hunting, hiking, ORV use, and horseback riding.

RECREATION AND PUBLIC PURPOSES ACT. A Congressional act which authorizes the Secretary of the Interior, under specific conditions, to sell or lease public domain lands to State and local governments for recreation and other public purposes and to qualified non-profit organizations for public and quasi-public purposes, including recreation, education, and health.

RECREATION AREA MANAGEMENT PLAN (RAMP). A written and approved activity plan for a geographical area of public lands which identifies recreation management actions to be implemented in achieving specific objectives related to RMP/MFP planning document decision. An RAMP is required for each area designated a Special Recreation Management Area.

RECREATION DAY. Any part of a day spent participating in a given activity.

RECREATION OPPORTUNITY SPECTRUM (ROS). A conceptual framework designed for inventory, planning and management of public lands from a recreation perspective.

RENEWABLE RESOURCES. Resources whose supply regenerate themselves over time. Use of these resources can continue indefinitely provided they are managed under a sustained yield philosophy. Living organisms and others such as soil and water which are closely associated with and affected by living organisms.

RESEARCH NATURAL AREA (RNA). A naturally occurring physical or biological unit where natural conditions are maintained insofar as possible. Further, the natural features are preserved for research and education purposes. The features to be preserved may be important or unique ecosystems, habitats, organisms, and may be terrestrial, fresh water or marine.

RESOURCE MANAGEMENT PLAN (RMP). A land use plan as prescribed by the Federal Land Policy and Management Act which establishes allowable resource uses and related levels of production or use to be maintained within the concepts of multiple use and sustained yield.

SALABLE MINERALS. See Minerals.

SCENIC AREA. An area that provides exceptional scenic quality and/or scenic vistas that merit special management attention to insure their protection from visual intrusions.

SEEDING CONDITION. See Condition.

SENSITIVE SPECIES. Species whose ranges are so limited that any reduction in numbers, habitat availability, or habitat condition could result in their being placed on the endangered list.

SENSITIVITY LEVEL. As applied to visual resource management, that degree of concern expressed by the user toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

SOIL COMPACTION. The process by which soil is packed tightly, losing its porosity.

SOIL PRODUCTIVITY. Capacity of a soil to produce vegetation. The amount produced will vary according to plant species and management practices.

SPECIAL RECREATION MANAGEMENT AREA (SRMA). An area where congressionally recognized recreation values exist or where significant public recreation issues or management concerns occur. Special or more intensive management is typically needed. Detailed recreation planning is required in these areas and greater managerial investment is likely.

STRATIFICATION. Layering of artifacts within a cultural resource site. If the site is undisturbed, the oldest artifacts are the deepest in the soil strata with the most recent artifacts nearest the surface.

STREAM HABITAT CONDITION RATINGS. A method used to evaluate the condition of the aquatic habitat of streams. Six factors are evaluated - stream shade, condition of streambank vegetation, streambank stability - stream channel stability, sedimentation of streambed, and instream cover - resulting in an overall rating of the habitat between unsuitable and excellent.

STRUTTING GROUNDS. Localized areas used by some species of the grouse family to display their courtship rituals.

TAYLOR GRAZING ACT OF 1934. Implemented to stop injury to the public grazing lands by preventing overgrazing and soil deterioration. It authorized the Secretary of Interior to manage the public rangelands.

THERMAL COVER. Vegetation used by deer for shelter. It may include saplings, shrubs, or trees at least 5 feet tall with up to 75 percent crown cover.

THREATENED OR ENDANGERED SPECIES. Endangered species are any species which are in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined to constitute a pest. Threatened species are any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

TIMBER PRODUCTION CAPABILITY CLASSIFICATION (TPCC). The process of separating land within the forest zone into major classes indicating relative suitability to produce timber on a sustained yield basis.

TREND (Range) - The direction of change in ecological condition.

UNIVERSAL SOIL LOSS EQUATION (USLE). An erosion model designed to compute average soil losses from sheet and rill erosion under specified conditions.

UTILIZATION. The proportion of current year's forage production that was consumed or destroyed by grazing animals, usually expressed as a percentage.

WILDLIFE LEAVE AREAS. Areas within land treatments which are not treated, providing wildlife cover and increasing the diversity of habitat types.

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APPENDICES

APPENDIX A

SOIL EROSION HAZARD BY ALLOTMENT

| Allotment | | Public | Acres with | Percent |
|-----------|-------------------------|--------|--------------|-----------|
| # | Name | Land | High or Very | of |
| | | Acres | High Hazard | Allotment |
| 0001 | Pearl Individual | 40 | 0 | 0 |
| 0002 | Pickle Butte | 80 | 0 | 0 |
| 0003 | Jerusalem | 11,699 | 11,465 | 98 |
| 0004 | Bissell Creek | 6,004 | 4,575 | 76 |
| 0005 | Big Willow Creek | 28,093 | 20,227 | 72 |
| 0006 | Sheep Creek Com. | 12,493 | 6,650 | 53 |
| 0007 | Tommy Carr | 4,927 | 3,320 | 67 |
| 0008 | Field | 445 | 174 | 39 |
| 0009 | Butte Ranch | 2,609 | 1,487 | 57 |
| 0010 | Chacartegui | 2,120 | 185 | 9 |
| 0011 | Round Valley | 18 | 0 | 0 |
| 0012 | Armacost Individual | 530 | 406 | 77 |
| 0013 | Wildhorse | 4,679 | 4,575 | 98 |
| 0014 | Lower Allotment | 360 | 360 | 100 |
| 0015 | Goodrich Individual | 200 | 0 | 0 |
| 0016 | Goodrich Com. | 5,261 | 4,511 | 86 |
| 0017 | County Line | 80 | 0 | 0 |
| 0018 | Ball Individual | 80 | 80 | 100 |
| 0019 | Sheep Gulch | 969 | 548 | 56 |
| 0020 | Barker Individual | 500 | 380 | 76 |
| 0021 | Basin Individual | 1,248 | 259 | 21 |
| 0022 | Beal Individual | 80 | 0 | 0 |
| 0023 | Bean Individual | 131 | 0 | 0 |
| 0024 | Beggs Individual | 121 | 70 | 58 |
| 0025 | Bettis FFR | 786 | 786 | 100 |
| 0027 | Bezates Individual | 360 | 280 | 78 |
| 0028 | Stillwell Individual | 200 | 200 | 100 |
| 0029 | Biggers Individual | 320 | 0 | 0 |
| 0030 | West Side | 1,741 | 1,206 | 69 |
| 0031 | Biggers | 77 | 0 | 0 |
| 0032 | Randall | 2,140 | 2,140 | 100 |
| 0033 | Camp Creek | 203 | 203 | 100 |
| 0034 | Bilbao Individual | 60 | 60 | 100 |
| 0035 | Black Canyon Individual | 850 | 605 | 71 |
| 0036 | Bivens Individual | 471 | 290 | 61 |
| 0037 | Brownlee | 1,455 | 1,395 | 96 |
| 0038 | Blessinger Individual | 200 | 200 | 100 |
| 0039 | Bott Individual | 537 | 430 | 80 |
| 0040 | Boyd Individual | 320 | 320 | 100 |
| 0041 | Granger Butte | 2,910 | 438 | 15 |
| 0042 | West Crane Individual | 480 | 0 | 0 |
| 0043 | Indian Valley | 4,103 | 1,904 | 46 |

| Allotment | | Public | Acres with | Percent |
|-----------|---------------------------|--------|--------------|-----------|
| # | Name | Land | High or Very | of |
| | | Acres | High Hazard | Allotment |
| 0043 | Indian Valley Com. | 2,208 | 840 | 38 |
| 0044 | Riley Butte | 765 | 234 | 30 |
| 0045 | Branch Individual | 1,004 | 1,004 | 100 |
| 0046 | T. Braun Individual | 465 | 240 | 52 |
| 0047 | Braun and Bacon Valley | 520 | 0 | 0 |
| 0048 | H & R Braun | 120 | 0 | 0 |
| 0050 | Rudger | 280 | 0 | 0 |
| 0051 | Brent Individual | 110 | 110 | 100 |
| 0052 | M. Brent Individual | 240 | 240 | 100 |
| 0053 | Burkhardt Individual | 280 | 280 | 100 |
| 0054 | Burt Individual | 40 | 0 | 0 |
| 0055 | Burton Individual | 439 | 0 | 0 |
| 0056 | Busch Individual | 1,701 | 958 | 56 |
| 0057 | Butler and Perkins | 360 | 218 | 60 |
| 0058 | Sweet | 80 | 80 | 100 |
| 0059 | Minnie | 4,707 | 2,606 | 55 |
| 0060 | West Crane | 8,459 | 1,008 | 12 |
| 0061 | R. Cada Individual | 255 | 0 | 0 |
| 0062 | Lower Crane | 2,034 | 1,049 | 51 |
| 0062 | Lower Crane Com. | 1,931 | 247 | 13 |
| 0063 | GT. Cada Individual | 1,076 | 450 | 42 |
| 0064 | Canaday Individual | 237 | 237 | 100 |
| 0065 | McMahan Ranch | 40 | 40 | 100 |
| 0066 | Carr Individual | 190 | 176 | 93 |
| 0067 | Mitchell Individual | 40 | 0 | 0 |
| 0068 | Chandler Individual | 360 | 360 | 100 |
| 0069 | Chestesen | 810 | 675 | 83 |
| 0070 | Clarkson Individual | 120 | 120 | 100 |
| 0071 | McFadden | 620 | 0 | 0 |
| 0072 | Clelland | 200 | 200 | 100 |
| 0073 | Coates FFR | 80 | 80 | 100 |
| 0074 | Cove Creek | 2,455 | 775 | 31 |
| 0075 | Coates A & R Individual | 240 | 240 | 100 |
| 0076 | Fruitvale | 1,000 | 1,000 | 100 |
| 0077 | Craig Individual | 280 | 0 | 0 |
| 0078 | Frisbee | 40 | 0 | 0 |
| 0079 | Fruitvale Glenn | 40 | 40 | 100 |
| 0080 | J. Craig Individual | 690 | 0 | 0 |
| 0081 | West Individual Allotment | 837 | 405 | 48 |
| 0082 | Cambridge | 520 | 157 | 30 |
| 0083 | Cruickshank Individual | 815 | 360 | 44 |
| 0084 | Dahnke | 320 | 320 | 100 |
| 0085 | Cove Springs | 40 | 0 | 0 |
| 0086 | Darnell Individual | 80 | 80 | 100 |
| 0087 | Webb Creek FFR | 290 | 10 | 3 |
| 0088 | Round Valley FFR | 80 | 0 | 0 |
| 0089 | Squaw Butte | 2,686 | 1,563 | 58 |

| Allotment | | Public Land | Acres with High or Very | Percent of |
|-----------|--------------------------|----------------|----------------------------|---------------|
| # | Name | Acres | High Hazard | Allotment |
| 0090 | Gambril Individual | 120 | 120 | 100 |
| 0092 | East Garden Valley | 2,352 | 2,352 | 100 |
| 0093 | Dickerson Individual | 40 | 40 | 100 |
| 0094 | Dishner Individual | 40 | 0 | 0 |
| 0095 | Horse Flat | 4,147 | 3,242 | 78 |
| 0096 | Dotson | 120 | 40 | 33 |
| 0097 | Dunham Individual | 40 | 0 | 0 |
| 0098 | Eakin Individual | 118 | 0 | 0 |
| 0099 | Emery Individual | 1,742 | 1,742 | 100 |
| 0100 | Brownlee | 1,932 | 1,776 | 92 |
| 0101 | Sage Creek | 1,664 | 500 | 30 |
| 0102 | New Bold | 200 | 30 | 15 |
| 0103 | Farrens | 40 | 0 | 0 |
| 0104 | Big Willow FFR | 809 | 663 | 82 |
| 0105 | Fisk Individual | 160 | 160 | 100 |
| 0106 | Indian Creek | 501 | 449 | 89 |
| 0107 | Indian Creek Com. | 204 | 104 | 51 |
| 0108 | Ford | 80 | 80 | 100 |
| 0109 | Long Gulch | 2,210 | 1,548 | 67 |
| 0110 | Frasier Individual | 343 | 343 | 100 |
| 0111 | Uhlam | 160 | 108 | 67 |
| 0112 | Gallant Individual | 320 | 60 | 19 |
| 0113 | Justus FFR | 320 | 192 | 60 |
| 0114 | Gatfield Individual | 199 | 190 | 95 |
| 0115 | Packer John | 2,907 | 2,907 | 100 |
| 0116 | Patterson & Goodwin | 3,516 | 3,516 | 100 |
| 0120 | Gossard Individual | 423 | 423 | 100 |
| 0121 | Gould Individual | 160 | 0 | 0 |
| 0122 | Leep Individual | 656 | 656 | 100 |
| 0123 | Greenwood Individual | 160 | 92 | 57 |
| 0124 | Gutherie Individual | 40 | 0 | 0 |
| 0125 | Dechambean Individual | 461 | 461 | 100 |
| 0126 | Hadley Individual | 200 | 200 | 100 |
| 0127 | Hagans Individual A | 40 | 40 | 100 |
| 0128 | Hagans Individual B | 120 | 120 | 100 |
| 0129 | Hale Individual | 120 | 0 | 0 |
| 0130 | Gross | 221 | 221 | 100 |
| 0131 | D. Harrington Individual | 760 | 750 | 99 |
| 0132 | Home Ranch | 187 | 187 | 100 |
| 0133 | Lake Ranch | 980 | 545 | 55 |
| 0134 | J. Harrington Individual | 200 | 200 | 100 |
| 0135 | Dad Harrington | 200 | 113 | 56 |
| 0136 | Kenny Ridge | 40 | 40 | 100 |
| 0137 | Hayshed | 40 | 0 | 0 |
| 0138 | L & J Harrington | 240 | 240 | 100 |
| 0139 | Lower Field | 1,562 | 1,562 | 100 |
| 0140 | Upper Field | 474 | 326 | 69 |

| Allotment | | Public | Acres with | Percent |
|-----------|-----------------------|--------|--------------|-----------|
| # | Name | Land | High or Very | of |
| | | Acres | High Hazard | Allotment |
| 0141 | Helmick Individual | 237 | 100 | 42 |
| 0142 | Wolf Creek | 1,630 | 970 | 59 |
| 0143 | Herrick FFR | 40 | 0 | 0 |
| 0144 | Higgins Individual | 160 | 0 | 0 |
| 0145 | Scott Creek | 3,220 | 3,055 | 95 |
| 0146 | Hoffman Individual | 200 | 0 | 0 |
| 0147 | Holbrook Individual | 257 | 30 | 12 |
| 0148 | Indian Mtn. Com. | 732 | 234 | 32 |
| 0149 | Holmes Individual | 80 | 0 | 0 |
| 0150 | Hopper Creek | 382 | 0 | 0 |
| 0151 | Deer Creek | 80 | 0 | 0 |
| 0152 | Hornet Creek | 681 | 163 | 24 |
| 0153 | Horning Individual | 40 | 0 | 0 |
| 0154 | North | 642 | 55 | 8 |
| 0155 | South | 980 | 152 | 15 |
| 0156 | Upper Ranch | 240 | 240 | 100 |
| 0157 | Hubbard Individual | 40 | 0 | 0 |
| 0158 | Jackson Creek | 1,514 | 1,049 | 69 |
| 0159 | Isom | 1,000 | 440 | 44 |
| 0160 | Jacobs Individual | 40 | 0 | 0 |
| 0161 | Goodrich Individual | 240 | 240 | 100 |
| 0162 | Johannsen Individual | 360 | 173 | 48 |
| 0163 | Kaufman Individual | 68 | 0 | 0 |
| 0164 | Keithley Individual | 1,507 | 388 | 26 |
| 0165 | J. Keithley | 920 | 423 | 46 |
| 0166 | Kennedy Individual | 68 | 0 | 0 |
| 0167 | Kilborn Individual | 160 | 160 | 100 |
| 0168 | Klingback Individual | 80 | 50 | 62 |
| 0169 | Langer Individual | 200 | 0 | 0 |
| 0170 | Little Jackson | 2,650 | 2,650 | 100 |
| 0171 | A. Legg Individual | 40 | 0 | 0 |
| 0172 | P. Legg Individual | 40 | 40 | 100 |
| 0173 | Line Individual | 40 | 0 | 0 |
| 0175 | Black Canyon Fenced | 80 | 0 | 0 |
| 0176 | Black Canyon | 4,540 | 2,050 | 45 |
| 0177 | Big Flat | 722 | 300 | 41 |
| 0178 | Paddy Flat | 840 | 840 | 100 |
| 0179 | Lyle Individual | 683 | 525 | 77 |
| 0180 | M. C. & M. Individual | 105 | 46 | 44 |
| 0181 | Black Canyon Ranch | 1,333 | 1,140 | 85 |
| 0182 | Soldier Creek Ranch | 44 | 0 | 0 |
| 0183 | Cabarton Ranch | 85 | 0 | 0 |
| 0184 | Siller Ranch | 208 | 175 | 84 |
| 0185 | Maddox Individual | 50 | 18 | 36 |
| 0186 | Mainvil Individual | 95 | 55 | 58 |
| 0187 | Marvin Individual | 735 | 185 | 25 |
| 0188 | West Side (South) | 1,055 | 564 | 53 |

| Allotment | | Public | Acres with | Percent |
|-----------|-----------------------|---------------|-----------------------------|-----------------|
| # | Name | Land Acres | High or Very High Hazard | of Allotment |
| 0189 | McCool Individual | 1,320 | 627 | 47 |
| 0191 | Linson Creek | 5,629 | 4,756 | 84 |
| 0193 | McGinnis Individual | 23 | 0 | 0 |
| 0194 | McMullen | 7,121 | 7,120 | 100 |
| 0195 | Syme-Moser River | 422 | 422 | 100 |
| 0196 | McPherson Individual | 240 | 240 | 100 |
| 0197 | Meinikheim Individual | 195 | 195 | 100 |
| 0198 | Meyer Individual | 120 | 40 | 33 |
| 0199 | Hays | 80 | 0 | 0 |
| 0200 | Advent Gulch | 119 | 0 | 0 |
| 0201 | Mitchell Individual | 180 | 0 | 0 |
| 0202 | Lund | 370 | 370 | 100 |
| 0203 | Sage Creek | 2,246 | 1,662 | 74 |
| 0204 | Dennet & Stover | 859 | 448 | 52 |
| 0205 | Crane Creek | 1,312 | 655 | 50 |
| 0206 | D. Moritz Individual | 361 | 45 | 12 |
| 0207 | Henley Basin | 3,196 | 2,956 | 92 |
| 0208 | Sage Creek | 4,028 | 3,177 | 79 |
| 0209 | Burroughs | 2,457 | 351 | 14 |
| 0210 | Montour Individual | 217 | 57 | 26 |
| 0211 | Nissula Individual | 243 | 233 | 96 |
| 0212 | Nissula Individual | 240 | 240 | 100 |
| 0213 | Osborn Individual | 321 | 321 | 100 |
| 0214 | Palmer Individual | 430 | 0 | 0 |
| 0215 | Parks Individual | 558 | 478 | 86 |
| 0216 | Patton | 560 | 372 | 66 |
| 0217 | Peebles | 319 | 187 | 58 |
| 0218 | Perkins Individual | 120 | 0 | 0 |
| 0219 | Peterson Individual | 555 | 555 | 100 |
| 0220 | Potter Individual | 158 | 72 | 45 |
| 0221 | Pound Individual | 2,184 | 1,137 | 52 |
| 0222 | Pratt Individual | 152 | 130 | 85 |
| 0223 | Putnam Individual | 720 | 461 | 64 |
| 0224 | Ranny Individual | 523 | 170 | 32 |
| 0225 | Indian Head Mtn. | 1,468 | 1,468 | 100 |
| 0227 | Ryals Individual | 80 | 80 | 100 |
| 0228 | Sagebrush Hill | 880 | 880 | 100 |
| 0229 | Stait | 329 | 0 | 0 |
| 0230 | Tarter | 790 | 230 | 29 |
| 0231 | Schlehuber Individual | 563 | 146 | 26 |
| 0232 | Schmeller Individual | 1,240 | 100 | 8 |
| 0233 | Hopper Creek | 2,650 | 583 | 22 |
| 0234 | Mrs. Seid Individual | 775 | 29 | 4 |
| 0235 | Pine | 2,029 | 27 | 1 |
| 0236 | Middle Fork | 480 | 480 | 100 |
| 0237 | Black Canyon (Shaw) | 10,438 | 6,311 | 60 |
| 0238 | Simplot Cattle Co. | 320 | 0 | 0 |

| Allotment | | Public Land | Acres with High or Very | Percent of |
|-----------|----------------------------|----------------|----------------------------|---------------|
| # | Name | Acres | High Hazard | Allotment |
| 0239 | Simplot Industries | 40 | 40 | 100 |
| 0240 | Clipper Flat | 1,239 | 593 | 48 |
| 0241 | Sister Individual | 40 | 40 | 100 |
| 0242 | Roy Slyter | 160 | 160 | 100 |
| 0243 | Rocky Ridge | 725 | 725 | 100 |
| 0244 | Smith Individual Allotment | 100 | 100 | 100 |
| 0246 | Smith Black Canyon | 580 | 485 | 84 |
| 0247 | Wilson Individual | 159 | 159 | 100 |
| 0248 | Hashagen Individual | 560 | 520 | 93 |
| 0249 | Sturgill Creek | 6,421 | 6,421 | 100 |
| 0250 | Squaw Creek | 120 | 0 | 0 |
| 0252 | Willow Creek | 200 | 0 | 0 |
| 0253 | Butte Field | 708 | 642 | 91 |
| 0254 | Sand Hollow | 5,160 | 4,562 | 88 |
| 0255 | Sutten Individual | 40 | 0 | 0 |
| 0256 | Sutten Ranches Individual | 80 | 0 | 0 |
| 0257 | Thomason Individual | 40 | 0 | 0 |
| 0258 | Thompson | 280 | 83 | 29 |
| 0259 | Towell | 120 | 0 | 0 |
| 0260 | Crane Creek Individual | 643 | 0 | 0 |
| 0261 | Twin Sisters | 3,067 | 1,267 | 41 |
| 0262 | Vogel & Ogle Individual | 160 | 0 | 0 |
| 0263 | Waite Individual | 120 | 0 | 0 |
| 0264 | Walker Individual | 160 | 160 | 100 |
| 0265 | Watson Individual | 30 | 30 | 100 |
| 0266 | Montour Individual | 316 | 197 | 62 |
| 0267 | Alder Creek Individual | 991 | 991 | 100 |
| 0268 | Weiser Sheep Company | 1,439 | 744 | 52 |
| 0269 | Wells Individual | 120 | 0 | 0 |
| 0270 | Whiteman Individual | 200 | 200 | 100 |
| 0271 | Williams-Fairchild | 1,006 | 60 | 6 |
| 0272 | Williamson | 160 | 50 | 31 |
| 0273 | Perkins Creek | 340 | 340 | 100 |
| 0274 | Winegar Individual | 120 | 120 | 100 |
| 0275 | Woodland Individual | 770 | 770 | 100 |
| 0276 | Lindsay Individual | 200 | 200 | 100 |
| 0278 | Spring Valley | 7,687 | 6,995 | 91 |
| 0279 | Black Canyon | 3,380 | 2,364 | 70 |
| 0280 | Lick Creek | 10,097 | 8,986 | 89 |
| 0284 | Spring Creek | 7,811 | 2,600 | 33 |
| 0286 | Deardorff Individual | 120 | 0 | 0 |
| 0287 | Stippich Pasture | 319 | 0 | 0 |
| 0288 | Double Diamond | 80 | 80 | 100 |
| 0289 | Porter Creek | 80 | 0 | 0 |
| 0290 | North Hornet | 230 | 230 | 100 |
| 0291 | Hornet Creek | 120 | 40 | 33 |
| 0292 | D. Moritz Individual | 120 | 120 | 100 |

| Allotment | | Public | Acres with | Percent |
|-----------|---------------------------|--------|--------------|-----------|
| # | Name | Land | High or Very | of |
| | | Acres | High Hazard | Allotment |
| 0293 | North Fork FFR | 440 | 0 | 0 |
| 0294 | U-Bar-M FFR | 571 | 571 | 100 |
| 0295 | Little Willow | 3,193 | 2,960 | 93 |
| 0297 | Wet Gulch | 40 | 40 | 100 |
| 0298 | X5 | 897 | 302 | 34 |
| 0299 | Cox FFR | 120 | 120 | 100 |
| 0300 | WRR Individual | 40 | 0 | 0 |
| 0301 | Holland Gulch | 4,114 | 1,643 | 40 |
| 0302 | Weiser Cove | 380 | 380 | 100 |
| 0303 | Skow FFR | 40 | 40 | 0 |
| 0304 | Center Allotment | 4,030 | 1,124 | 28 |
| 0306 | Big Creek | 560 | 320 | 57 |
| 0307 | Dry Lake | 1,360 | 400 | 29 |
| 0308 | Sky Ranch Individual | 111 | 0 | 0 |
| 0309 | Boise Front | 5,837 | 5,837 | 100 |
| 0310 | Black Canyon | 16,770 | 9,223 | 55 |
| 0311 | No Unit | 5,208 | 5,208 | 100 |
| 0312 | Bannister Basin | 2,073 | 2,013 | 97 |
| 0313 | Fenwick Place | 80 | 80 | 100 |
| 0314 | Bingman | 40 | 40 | 100 |
| 0315 | Terteling | 40 | 40 | 100 |
| 0350 | Lucky Peak | 164 | 164 | 100 |
| 0352 | Stephens Individual | 399 | 53 | 13 |
| 0355 | Robert Royston Individual | 475 | 475 | 100 |
| 0356 | Roberts Individual | 40 | 40 | 100 |
| 0361 | Crane Creek Allotment | 9,804 | 4,154 | 42 |
| 0362 | Foothills | 7,798 | 5,532 | 71 |
| 0363 | Drake Individual | 270 | 270 | 100 |
| 0364 | Wiskey Rapids Allotment | 316 | 316 | 100 |
| 0365 | Old Craig Allotment | 320 | 0 | 0 |
| 0366 | Staley Allotment | 201 | 60 | 30 |
| 0367 | Minnie Snyder FFR | 175 | 175 | 100 |
| 0368 | Rock Creek FFR | 3,677 | 3,603 | 98 |
| 0369 | McChard Butte | 6,693 | 6,653 | 99 |
| 0370 | Upper | 15,474 | 8,820 | 63 |
| 0371 | Callender Individual | 296 | 260 | 88 |
| 0372 | Warm Springs | 233 | 90 | 38 |
| 0373 | Williams Individual | 338 | 338 | 100 |
| 0374 | 1000 Acre Field | 100 | 100 | 100 |
| 0375 | Gibson Allotment | 120 | 0 | 0 |
| 0376 | Fry Individual | 92 | 0 | 0 |
| 0377 | Dennet Creek FFR | 770 | 770 | 100 |
| 0378 | Lower Raft Creek | 2,120 | 2,120 | 100 |
| 0379 | Upper Raft Creek FFR | 245 | 245 | 100 |
| 0380 | Mineral | 951 | 951 | 100 |
| 0381 | Cow Camp | 243 | 243 | 100 |
| 0382 | Beef Trap | 985 | 985 | 100 |

| Allotment | | Public | Acres with | Percent |
|-----------|-------------------------|----------|--------------|-----------|
| # | Name | Land | High or Very | of |
| | | Acres | High Hazard | Allotment |
| 0383 | Forsgren Individual | 40 | 0 | 0 |
| 0384 | Jenkins Creek | 2,109 | 2,029 | 96 |
| 0385 | Putnam Custodial | 40 | 40 | 100 |
| 0386 | White Butte Allotment | 466 | 0 | 0 |
| 0387 | Individual | 80 | 40 | 50 |
| 0388 | Pedro & Upper Wolf | 205 | 120 | 58 |
| 0389 | Long Hollow Field | 1,628 | 1,331 | 82 |
| 0390 | Fenced Federal Range | 726 | 540 | 74 |
| 0391 | Little Emmett Allotment | 24,323 | 6,809 | 28 |
| 0392 | Fenced Federal Range | 180 | 38 | 21 |
| 0393 | Indian Jake | 17,224 | 8,004 | 46 |
| 0396 | Bivens Purchase | 200 | 160 | 80 |
| 1278 | Quartzburg | 2,179 | 2,179 | 100 |
| 0388 | Fenced Federal Range | 120 | 60 | 50 |
| | TOTAL | *464,920 | 295,972 | 64 |

* Note that these are totals for allotted acres only and therefore do not equal total acres for the RMP area.

APPENDIX B

ACTIONS AFFECTING SOILS*

| Action | Alt. A | Alt. B | Alt. C | Alt. D | Alt. E |
|--|-----------|-----------|-----------|-----------|-----------|
| Rangeland Improvements: | | | | | |
| Livestock - Seed, burn, disc or spray over 20 yrs (acres) | 0 | 23,400 | 13,000 | 31,000 | 24,279 |
| Pipelines (miles) | 6 | 12 | 6 | 36 | 15 |
| Wildlife - Burn, disc and seed over 20 yrs (acres) | 0 | 7,672 | 6,802 | 8,295 | 8,295 |
| Livestock Use 20 yrs (AUMs) | 66,014 | 71,076 | 53,543 | 76,613 | 70,538 |
| Timber Harvest 20 yrs: | | | | | |
| Roads Built (miles) | 40 | 68 | 20 | 116 | 40 |
| Annual Cut (MMBF) | 1.0 | 1.7 | 0.5 | 2.9 | 1.0 |
| ORV Use (acres): | | | | | |
| Open | 381,653 | 320,502 | 2,840 | 3,240 | 2,880 |
| Limited | 103,269 | 125,447 | 476,730 | 446,621 | 465,354 |
| Closed | 113 | 113 | 1,879 | 1,878 | 1,948 |
| Mineral Exploration and Development: | | | | | |
| Leasable open (acres) | 456,289 | 453,689 | 451,789 | 453,689 | 456,289 |
| Locatable open (acres) | 456,289 | 453,681 | 450,386 | 452,286 | 456,281 |
| Agricultural Transfer (acres) | 1,020 | 1,486 | 0 | 560 | 480 |

* The impacts caused by land use actions are discussed in the narratives of the alternatives. This table indicates the area affected by the action.

APPENDIX C

MAPPING RANGELAND VEGETATION USING LANDSAT MSS DIGITAL DATA FOR RESOURCE MANAGEMENT PLANNING

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ABSTRACT

The objective of this project was to produce usable map products showing present rangeland vegetative communities based on Landsat MSS digital analysis and appropriate ancillary data. These products have provided the Bureau of Land Management, Cascade Resource Area (CRA) staff with a base inventory for the CRA Resource Management Plan and Environmental Impact Statement (RMP/EIS). They have also provided the Soil Conservation Service (SCS) with an inventory of private rangeland within BLM grazing allotments. Of particular interest was the ability of Landsat spectral data to distinguish non-native homogeneous stands of medusahead grass (Elymus caputmedusae) and cheatgrass brome (Bromus tectorum) from native plant communities. This project represents a cooperative interagency effort to generate uniform vegetation cover data at least possible cost.

INTRODUCTION

The Bureau of Land Management (BLM) resource inventory process is structured in a manner that meets legislative and policy requirements. It provides decisionmakers with the information necessary to make sound land-use and resource management decisions. Inventory data provides the factual basis for development of Resource Management Plans (RMP's). The Federal Land Policy and Management Act of 1976 states that inventories be maintained, on a continuing basis, of all public lands. These inventories are to be kept current to reflect changes in conditions and to identify new and emerging resource values (FLPMA 1976).

Traditional inventories in the Boise District BLM were conducted by a Resource Inventory Team (RIT). This team consisted of up to twelve resource specialists and was responsible for all inventory work associated with RMP's. The team concept was an effective but costly method of accomplishing

the task. Costs for vegetation inventories alone averaged \$.15/acre.* Faced with decreasing budgets and personnel, the Resource Inventory Team disbanded in 1982. Alternative methods to accomplish resource inventories were needed.

A rangeland inventory need existed for the BLM's Cascade Resource Area (CRA) in preparation for their Resource Management Plan. Limited rangeland inventory data existed for the CRA in 1982. A very scattered land ownership pattern and limited access contributed to this lack of current inventory. Some lands in the resource area had never even been visited by BLM personnel.

The use of remote sensing techniques was chosen by the CRA manager as an alternative method for gathering vegetation inventory data. The use of Landsat MSS digital data was available as a tool to accomplish this task. Of particular concern to the CRA manager was the continued proliferation of non-native homogeneous stands of medusahead grass (Elymus caputmedusae) and cheatgrass brome (Bromus tectorum). These two annual grass species encompass the majority of poor condition rangeland in the CRA. The ability of Landsat MSS digital data to distinguish these non-native homogeneous stands from native plant communities was imperative in this inventory effort.

USER REQUIREMENTS

The production of present rangeland vegetation maps based on Landsat MSS digital data was the basic requirement to meet the vegetation inventory needs for the CRA Resource Management Plan. In addition, the USDA Soil Conservation Service (SCS) was interested in using data gathered on private rangelands within BLM allotments for developing conservation plans. The information was planned for use in future SCS-BLM coordinated rangeland planning efforts.

Specialized image processing equipment was needed to process Landsat MSS data. The BLM's Branch of Technology Applications Assistance, at the Denver Service Center, was capable of processing the necessary data. However, due to an existing work schedule and limited personnel, this facility was unable to provide these services in the required timeframe. An alternate remote sensing facility was needed. With the limited funding available for this project, it was necessary that an alternate facility meet the following criteria:

1. Low cost. The contracted facility should benefit from the results and be willing to absorb certain processing costs associated with the project, a true cost share effort.
2. Close proximity. Due to restricted travel funds available for this project, the contracted facility must be close to both the project area and the Boise District Office.
3. Personnel interaction. Past experience has shown that the close interaction of contracted remote sensing facilities and BLM resource personnel is essential for the most effective use of the data.

*Average costs from 1977-1981 as reported by Boise District Resource Inventory Team Leader.

4. Computer compatibility. The alternate facility must have a computer hardware/software package capable of interacting with the BLM's Interactive Digital Image Manipulation System (IDIMS) at Denver. This was required for hard copy output.

5. Interagency cooperation. The project was designed to be a cooperative effort and learning experience for all participants. The alternate facility must provide necessary training to BLM personnel to assist in data processing, therefore reducing costs.

IMAGE ANALYSIS FACILITY

The only facility meeting these requirements was the State of Idaho, Department of Water Resources, Idaho Image Analysis Facility (IIAF). It is a complete image processing facility, established by executive order, to service Landsat MSS user needs in the State of Idaho.

The IIAF is located in Boise, Idaho, close to the BLM Boise District Office and the project area. Travel costs were eliminated enabling BLM personnel to participate in data processing on a routine basis. This participation provided a better understanding of the complexity of the project and a more effective use of the output products.

The IIAF supports a suitable hardware/software computer package (VICAR/IBIS) which is compatible with BLM's IDIMS at the Denver Service Center. Computer compatible tapes were produced for hardcopy output. BLM personnel were able to work directly with IIAF personnel for data output. The IIAF was willing to provide all necessary training in the use of the (VICAR/IBIS) image analysis software and the interactive digital image display device. The primary emphasis of the IIAF is technology applications through development and application of operational remote sensing management and assessment programs.

The required data generation would normally cost about \$.06/acre to process. The IIAF provided the required data to the BLM for about \$.02/acre. The \$.04/acre difference was absorbed by the IIAF to enhance its data processing capabilities for future project work. This facility is non-profit by directive.

DESCRIPTION OF THE PROJECT AREA

The CRA supports a diverse environment for a variety of vegetation types. A combination of man's actions, fire history, climate, elevation, aspect, and soil types account for this diversity.

The resource area stretches approximately 120 miles from north to south and 70 miles from east to west. The temperature/moisture regimes associated with this large area account for a variety of vegetation zones. The vegetation zones represented in the CRA include the following:

1. Sage/Grass Zone
2. Wheatgrass/Bluegrass Zone
3. Ponderosa Pine Zone
4. Douglas-Fir Zone
5. Spruce/Fir Zone

Because of the size and diversity of the CRA, it was decided that a sample area would be selected for processing in order to evaluate its usefulness over the entire area. This sample area, or Phase I, encompassed 508,000 acres. Native vegetation is primarily big sagebrush/perennial grass. Average annual precipitation is about 12 inches. About 75% of the soils are formed in residuum, alluvium, and colluvium from tertiary flow basalt and about 25% are formed in residuum, alluvium and colluvium from Pliocene stream and lake deposits. Elevations range from about 2400 feet to 6100 feet.

Of the 508,000 acres, about 350,000 acres are BLM administered public lands. The remaining 158,000 acres are private and state lands.

The limitations on fiscal year budgeting necessitated breaking the project into three distinct phases. Phase 2 and Phase 3, consisting of an additional 500,000 acres of public and private rangeland, were added to the project area after the successful completion of Phase I. The area of each phase was no larger than could easily be field checked in one field season. The Phase 3 classification was budgeted entirely by the SCS.

PROCEDURES

This project represents the operational use of Landsat MSS digital data. The classification techniques and inventory methodology developed as a result of the BLM-NASA Cooperative ASVT projects in Alaska, Arizona, and Idaho were used.

Environmental Stratification

Using geologic maps (1:250,000), the project area was stratified to separate soils derived from igneous and sedimentary parent materials. Agricultural lands were manually interpreted on National High Altitude Aerial Photography (NHAP) and transferred onto 1:100,000 scale maps using a Zoom Transfer Scope (ZTS). The strata were digitized and rasterized into image masks and were used to remove riparian confusion in the classification. Classification output for each geologic strata were treated separately, and the agricultural stratum was embedded into the final classification.

Administrative Stratification

BLM personnel compiled grazing allotment information onto the 1:100,000 scale Surface Management Map Series. Grazing allotment boundaries and BLM administered lands were digitized and converted to raster format. Image masks of grazing allotments by ownerships were created and used in an overlay process with the classified Landsat data. Tabular reports of landcover acreage for BLM and non-BLM lands by grazing allotment were then generated.

Classification of Landsat Data

A guided clustering methodology was employed to generate training statistics. BLM and SCS personnel familiar with the CRA selected training sites using NHAP and a 1:250,000 scale Landsat FCC (path:45 row:29 date:July 17 1980 Id #:82201317514X0). The Landsat MSS data for each training area (50x50 pixels) was clustered and classified into 10-12 spectral classes.

The spectral classes were color coded, displayed, and photographed on a cathode ray tube (CRT). Display photographs and NHAP photography were registered using the ZTS. The delineated photos were taken into the field and each spectral class was labeled and ground checked for:

- | | |
|--------------------|--------------------------|
| 1. Physiography | 7. Species Composition % |
| 2. Elevation | 8. Range Site |
| 3. Slope % | 9. Range Condition |
| 4. Parent Material | 10. Surface Stones % |
| 5. Stratum | 11. Bare Soil % |
| 6. Aspect | 12. Rock Outcrop % |

A master statistics file was compiled from the individual training area statistics files. Spectral plots (band 5 vs. 7) for each training area were overlaid on a light table and the measurement space filled with as many distinct (Swain-Fu distance) spectral classes as possible. In this way a master statistics file containing 57 spectral classes representing 15 vegetation cover types was assembled (number of spectral classes and cover types varied for each phase). The project area was classified using a maximum likelihood decision rule.

The classified data were then resampled and registered to a 57 meter UTM grid. The agricultural stratum was embedded into the classified data and the spectral classes combined into the final output classes.

Continuity Evaluation

Due to time and funding limitations, a statistically designed accuracy assessment of the spectral data could not be conducted. An alternative action to assess the accuracy of the data was developed in the form of a continuity evaluation. This proved most useful in determining the reliability of individual spectral classes within each stratum and for developing land cover descriptions.

Random 40 acre sites were selected for individual spectral classes in each stratum. Each spectral class was evaluated at least twice within each stratum. The sites were transferred to 1:24,000 USGS quads for field verification.

A special "field" form was developed to record information at each site. Land surface feature data recorded included present vegetation, surface soil conditions, rock outcrop or stoniness, slope, aspect, and the probable presence of shadow. Care was taken to ensure that each spectral class was precisely located on the ground prior to documentation.

This data was used to evaluate the composition of each spectral class. As was expected, some spectral classes were very uniform in terms of land cover composition while others showed a wide range in composition. This data was also used to develop land cover descriptions for each spectral class. The actual composition of each description was based on the field data. A range-in-characteristics was developed indicating what could be expected in terms of vegetation and land surface composition within each spectral class.

The documentation of the variability within each spectral class served as the accuracy assessment for the project. Those classes having a wide diversity in land cover feature data were judged to be less accurate than those having a narrower diversity. Those land cover units having a wide diversity in composition were isolated for further analysis.

Output Products

Computer compatible tapes (CCT's) produced through IIAF were sent to the BLM's Denver Service Center. Through the BLM's Interactive Digital Image Manipulation System (IDIMS), hardcopy color maps were produced for the entire project area. In this form, the interpreted data was conveniently input to a geo-based information system. The data was smoothed and output at 1:100,000 scale to correspond to BLM planning base maps. These computer generated maps were used to compile the final rangeland vegetation and condition maps for the CRA Resource Management Plan.

The output products generated in the project include the following:

1. Tabular reports listing authorized grazing allotments showing acreage of vegetation cover types within BLM and non-BLM lands. This simplicity in cover type area determination is an additional cost advantage over manual map interpretation.
2. Color-coded maps (Applicon) of the CRA at 1:100,000 scale showing vegetation cover types.
3. Symbol mylar map overlays (Versatec) for the 7.5 minute topographic maps of the project area at 1:24,000 scale depicting vegetation cover types.

SUMMARY

Map products showing present rangeland vegetation based on Landsat MSS digital analysis have provided the CRA with a base inventory for resource management planning. These computer generated maps were used to compile the final rangeland vegetation and condition maps for the CRA Resource Management Plan and Environmental Impact Statement.

Landsat MSS data was able to easily distinguish and quantify non-native homogeneous stands of medusahead grass (Elymus caputmedusae) and cheatgrass brome (Bromus tectorum) from other native plant communities. This study has established baseline information for monitoring the changes in the distribution of these two species.

Interagency cooperation reduced traditional inventory costs of about \$.15/acre to about \$.06/acre. Through the use of a local remote sensing facility, IIAF, uniform vegetation cover data was generated at least cost. This facility, non-profit by law, absorbed some processing costs associated with the project. With a close proximity to the Boise District Office and project area, travel costs were virtually eliminated. The facility provided training to BLM and SCS personnel to assist in data processing which allowed close interaction of remote sensing specialists and professional resource specialists. This interaction is essential for the most effective use of the output products. Computer compatibility between IIAF and the BLM's

Denver Service Center allowed the transfer of CCT's for the production of hardcopy color (Applicon) and mylar symbol (Versatec) maps.

A continuity evaluation was used to assess the accuracy of the image classification. This proved most useful in determining the reliability of the data and for developing land cover class descriptions.

The documentation of the variability within each spectral class served as the accuracy assessment for the project. The successful results of the continuity evaluation required close involvement between the remote sensing analyst, the image data, the field specialists, and the users of the data. The quality of the image classification can only be as good as the quality of the training data and accuracy evaluation used to perform the classification.

The entire project represents a cooperative effort by three agencies to generate uniform vegetation cover data at the least possible cost. The sharing of digital data bases and cooperative efforts are necessary cost saving mechanisms which should be addressed in future Bureau of Land Management remote sensing projects.

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APPENDIX D

RANGE CONDITION METHODOLOGY

The inventory of present vegetation in the Cascade Resource Area was begun in 1983. The inventory was based on Landsat Digital Analysis, remote sensing techniques and an intensive field verification effort.

The various vegetation cover types inventoried were combined into the following types:

1. mixed grass
2. sagebrush/mixed grass
3. mountain brush/perennial grass
4. perennial grass/deciduous brush/or riparian
5. conifer/forest brush/perennial grass
6. conifer closed canopy
7. mixed annual grass
8. dense medusahead grass
9. riparian grassland
10. sparse sagebrush/medusahead grass
11. sagebrush/perennial grass

These 11 types were used to produce a present vegetation map for the entire resource area.

Resource specialists used soil types and species composition of the individual vegetation cover types to determine a condition class range within each type.

Range specialists familiar with the Cascade Resource Area used the best available information from range surveys, Landsat, ground checks, and riparian studies to derive a condition class percent by allotment.

Because time and funding restraints precluded the tabulation and assessment of slope and topography effects on total available forage an assumption has been made that the 5-year average demand is the same as the estimated current available forage production. Monitoring and utilization studies will be used to verify the current carrying capacity and/or to establish the need for a change in active demand.

APPENDIX E

RANGE CONDITION

| Aliquot Number | Aliquot Name | Public Land Acres | Estimated Current Production | Pre. Active | Pre. Total | Average Use | Condition | Season of Use | Class of Livestock | Wild Horses | M Category | D Category | Erosion Hazard | Acres High |
|----------------|--------------------|-------------------|------------------------------|-------------|------------|-------------|-----------|---------------|--------------------------------------|-------------|--|------------|----------------|------------|
| | | | (Pounds) | (AUM's) | (AUM's) | (AUM's) | | | C = Cattle S = Sheep H = Horse | | M = Maintain I = Improve C = Custodial | | | |
| 1 | Pearl Ind. | 40,000 | 42,129 | 10 | 10 | 10 | | 4/1-4/70 | C | | | | | 0 |
| 2 | Pavley Butte | 1,746,000 | 1,200,540 | 142 | 142 | 588 | | 1/1-7/10 | C | | | | | 400 |
| 3 | Urethane | 11,679,227 | 11,596,941 | 1,428 | 1,428 | 957 | 2,909 | 4/4/01 | 2,228 | | | | | 11,492 |
| 4 | Biscuit Creek | 6,004,42 | 4,712,840 | 1,124 | 1,124 | 1,124 | | 1/1-7/0 | C | | | | | 2,402 |
| 5 | Big Willow Cr. | 28,953,47 | 18,760,144 | 4,700 | 4,700 | 3,758 | | 2,433 | 15,289 | 8,936 | | | | 20,227 |
| 6 | Sheep Cr. Cwm. | 12,402,880 | 11,672,444 | 2,102 | 2,102 | 1,039 | 1,550 | 7/1-10/11 | 1,182 | | | | | 4,450 |
| 7 | Tommy Carr | 4,927,44 | 4,927,44 | 781 | 781 | 547 | 196 | 4/4/5 | 244 | | | | | 1,720 |
| 8 | Chatterman Hange | 445,00 | 734,416 | 45 | 45 | 45 | | 4/1-8/1 | 6 | 439 | | | | 174 |
| 9 | Butte Ranch | 2,405,75 | 1,448,265 | 10 | 10 | 10 | 22 | 1/4/7-1/11 | 1,114 | | | | | 141 |
| 10 | Chatterman | 2,120,00 | 894,420 | 175 | 175 | 175 | 17 | 1/1-4/1 | 140 | | | | | 185 |
| 11 | Round Valley | 17,72 | 9,486 | 57 | 57 | 0 | | 7/1-9/20 | C | | | | | 0 |
| 12 | Krasnov Ind. | 529,94 | 479,204 | 50 | 50 | 50 | 125 | 3/4 | 15 | | | | | 404 |
| 13 | Wichita | 4,679,00 | 5,165,976 | 256 | 256 | 256 | | 4/1-5/1 | 162 | | | | | 4,235 |
| 14 | Lower Allot. | 340,00 | 371,320 | 59 | 59 | 59 | 19 | 5/5-8/12 | 12 | | | | | 340 |
| 15 | Goodrich Ind. | 200,00 | 305,400 | 57 | 57 | 40 | 741 | 1/2/4 | 154 | 46 | | | | 0 |
| 16 | Goodrich Cwm. | 5,261,45 | 3,612,480 | 1,117 | 1,050 | 1,098 | 224 | 1/3/2 | 3,249 | 133 | | | | 4,511 |
| 17 | County Line | 80,00 | 46,120 | 9 | 9 | 9 | | 5/1-7/15 | 0 | | | | | 0 |
| 18 | Hall Ind. | 80,00 | 55,440 | 14 | 14 | 14 | | 4/1-9/10 | C | | | | | 80 |
| 19 | Sheep Gulch | 94,14 | 78,720 | 238 | 238 | 234 | | 2/1-12/1 | 949 | | | | | 548 |
| 20 | Barber Ind. | 500,00 | 407,320 | 96 | 96 | 96 | | 4/1-11/10 | 0 | | | | | 0 |
| 21 | Bass Ind. | 1,248,02 | 801,440 | 245 | 245 | 205 | | 4/1-7/10 | 295 | 953 | | | | 259 |
| 22 | Beal Ind. | 80,00 | 44,400 | 12 | 12 | 12 | | 4/1-5/15 | C | | | | | 0 |
| 23 | Beal Ind. | 131,41 | 123,926 | 25 | 25 | 25 | | 3/1-12/15 | 102 | 29 | | | | 0 |
| 24 | Beggs Ind. | 120,47 | 84,548 | 12 | 12 | 12 | 15 | 1/2 | 4 | | | | | 0 |
| 25 | Bellis FFR | 786,10 | 472,080 | 132 | 132 | 132 | | 4/1-1-30 | 786 | | | | | 786 |
| 26 | Berates Ind. | 360,00 | 247,300 | 70 | 70 | 70 | 56 | 2/2 | 12 | | | | | 280 |
| 28 | Stellwell Ind. | 200,00 | 151,260 | 36 | 36 | 36 | | 4/1-4-30 | 200 | 0 | | | | 0 |
| 29 | Higgins Ind. | 320,00 | 146,400 | 30 | 30 | 30 | | 3/1-8/13 | 132 | 180 | | | | 0 |
| 30 | West Side North | 1,741,31 | 1,741,240 | 737 | 737 | 481 | 525 | 8/4 | 353 | | | | | 1,204 |
| 31 | Higgins | 56,80 | 42,135 | 12 | 12 | 12 | | 4/1-4-30 | 0 | | | | | 0 |
| 32 | Randall | 2,140,00 | 2,006,100 | 421 | 421 | 344 | 509 | 1/4/2 | 4 | | | | | 2,140 |
| 33 | Camp Creek | 203,22 | 146,872 | 36 | 36 | 36 | 75 | 1/2 | 2 | | | | | 203 |
| 34 | Buena Ind. | 40,00 | 42,410 | 8 | 8 | 8 | | 5/1-8/1 | C | | | | | 40 |
| 35 | Black Canyon Ind. | 892,32 | 896,760 | 152 | 152 | 152 | | 4/1-4-25 | 892 | | | | | 0 |
| 36 | Rivers Ind. | 470,84 | 531,220 | 89 | 174 | 141 | 24 | 4/5 | 26 | | | | | 250 |
| 37 | Brownlee | 1,455,45 | 1,454,454 | 330 | 330 | 327 | 100 | 1/301 | 54 | | | | | 1,295 |
| 38 | Blossinger Ind. | 200,00 | 105,400 | 24 | 24 | 25 | 100 | 100 | 100 | | | | | 200 |
| 39 | Bott Ind. | 579,85 | 418,952 | 50 | 50 | 51 | 118 | 2/4 | 8 | | | | | 0 |
| 40 | Boyd Ind. | 320,00 | 188,196 | 62 | 62 | 62 | | 4/1-5/15 | 0 | | | | | 320 |
| 41 | Granger Butte | 2,910,28 | 2,910,560 | 432 | 432 | 427 | 72 | 2/4 | 212 | | | | | 438 |
| 42 | West Crane Ind. | 480,00 | 249,540 | 52 | 52 | 52 | | 1/1-11/10 | 0 | | | | | 0 |
| 43 | Indian Valley | 4,102,71 | 4,102,710 | 793 | 793 | 1,562 | 763 | 4/7/99 | 637 | | | | | 1,904 |
| 44 | Indian Valley Cwm | 2,208,12 | 4,302,092 | 719 | 719 | 707 | | 4/15-11/15 | C | | | | | 840 |
| 45 | Kiley Butte | 760,00 | 401,440 | 91 | 91 | 90 | | 4/1-5/15 | C | | | | | 724 |
| 45 | Branch Ind. | 1,004,12 | 572,120 | 124 | 124 | 124 | 19 | 3/1 | 15 | | | | | 1,004 |
| 46 | J. Braun Ind. | 444,40 | 248,760 | 207 | 207 | 138 | | 4/1-4/15 | 11/11-11/30 | C | | | | 240 |
| 47 | Braun-Saxon Valley | 520,00 | 250,400 | 105 | 105 | 105 | 4 | 4/75 | 41 | | | | | 0 |
| 48 | HAR Braun | 120,00 | 16,800 | 30 | 30 | 30 | | 4/1-6-30 | 0 | | | | | 0 |
| 50 | Hugger | 200,00 | 126,460 | 52 | 52 | 54 | 183 | 97 | 23 | | | | | 0 |
| 51 | Brent Ind. | 110,00 | 79,480 | 22 | 22 | 22 | | 4/1-5/31 | C | | | | | 110 |
| 52 | M. Brent Ind. | 240,00 | 147,120 | 43 | 43 | 43 | | 5/1-9/30 | 0 | | | | | 240 |
| 53 | Burkhardt Ind. | 280,00 | 220,200 | 32 | 32 | 30 | | 4/1-5/15 | 0 | | | | | 280 |
| 54 | Burt Ind. | 40,00 | 27,840 | 4 | 4 | 4 | | 4/1-5/1 | C | | | | | 0 |
| 55 | Burton Ind. | 479,29 | 204,440 | 47 | 47 | 47 | | 4/1-8-15 | 0 | | | | | 0 |
| 56 | Bush Ind. | 1,700,81 | 1,249,400 | 225 | 225 | 219 | 96 | 956 | 449 | | | | | 1,700 |
| 57 | Butler & Perkins | 360,00 | 249,480 | 43 | 43 | 43 | | 4/1-4-30 | 0 | | | | | 360 |
| 58 | Sweet | 80,00 | 44,400 | 24 | 24 | 24 | | 4/1-4-30 | C | | | | | 80 |
| 59 | Wience | 4,706,94 | 1,137,740 | 606 | 606 | 611 | 41 | 2/723 | 1,706 | | | | | 2,406 |
| 60 | West Crane | 8,848,18 | 4,702,240 | 1,260 | 1,459 | 1,200 | | 5/178 | 1,281 | | | | | 1,008 |
| 61 | P. Cade Ind. | 225,18 | 130,440 | 35 | 35 | 35 | | 1/2-7/11 | 136 | 119 | | | | 0 |
| 62 | Lower Crane | 2,034,40 | 1,221,044 | 271 | 271 | 245 | | 4/1-8/17 | 11/11-12/31 | C | | | | 1,049 |
| 63 | Lower Crane Cwm. | 1,930,56 | 1,506,520 | 253 | 253 | 174 | 9 | 1/802 | 120 | | | | | 1,930 |
| 67 | T. Cade Ind. | 1,074,40 | 449,240 | 83 | 83 | 83 | | 4/1-8-15 | 0 | | | | | 450 |
| 68 | Candey Ind. | 227,00 | 325,400 | 36 | 36 | 36 | | 4/1-7/31 | C | | | | | 237 |
| 69 | Mahan Ranch | 40,00 | 22,320 | 9 | 9 | 9 | | 4/1-10/31 | C | | | | | 40 |
| 70 | Carr Ind. | 190,00 | 105,440 | 24 | 24 | 24 | | 4/1-5/31 | 11/11-12/15 | C | | | | 176 |
| 71 | Michael Ind. | 40,00 | 14,520 | 8 | 8 | 8 | | 4/1-4-15 | 0 | | | | | 40 |
| 72 | Chandler Ind. | 360,00 | 384,224 | 60 | 60 | 60 | 95 | 244 | 4 | | | | | 360 |
| 73 | Christensen Ind. | 810,00 | 611,320 | 285 | 285 | 285 | | 4/1-9-30 | 84 | 726 | | | | 675 |
| 74 | Clarkson Ind. | 120,00 | 113,220 | 26 | 26 | 26 | | 4/1-5/31 | 120 | | | | | 120 |
| 75 | Madden Ind. | 420,00 | 449,200 | 69 | 69 | 68 | | 4/1-7/31 | C | | | | | 0 |
| 76 | Cleveland | 200,00 | 326,744 | 41 | 41 | 41 | 40 | 89 | 1 | | | | | 200 |
| 77 | Cates FFR | 80,00 | 16,184 | 16 | 16 | 16 | | 4/1-9-30 | 80 | | | | | 80 |
| 78 | Cove Creek | 2,455,00 | 1,111,445 | 192 | 192 | 174 | | 4/1-10/1 | 4/1-7/31 | C | | | | 2,455 |
| 79 | Coules BAR Ind. | 240,00 | 129,240 | 47 | 47 | 47 | | 5/1-5/31 | 9/11-11/30 | C | | | | 240 |
| 76 | Frustvale | 1,000,00 | 931,032 | 158 | 158 | 120 | 41 | 446 | 391 | 12 | | | | 1,000 |
| 77 | Craig Ind. | 280,00 | 6 | 6 | 6 | 6 | | 4/1-10/31 | 0 | | | | | 280 |
| 78 | Frustvale | 46,40 | 217,280 | 39 | 39 | 39 | | 4/1-8-15 | 0 | | | | | 0 |
| 79 | Frustvale Glenn | 40,00 | 12,880 | 9 | 9 | 9 | | 4/1-5-1/1 | C | | | | | 40 |
| 80 | J. Craig Ind. | 490,00 | 312,125 | 144 | 144 | 144 | | 5/1-5/30 | 547 | 143 | | | | 490 |
| 81 | West Ind. Allot. | 827,09 | 424,440 | 126 | 126 | 126 | | 4/1-7-10 | 750 | 87 | | | | 405 |
| 82 | Cambridge | 520,00 | 275,080 | 88 | 88 | 88 | | 4/1-5/31 | 0 | | | | | 157 |
| 83 | Cruckshank Ind. | 815,00 | 770,790 | 113 | 113 | 113 | | 4/1-5/31 | C | | | | | 815 |
| 84 | Danise | 320,00 | 244,220 | 59 | 59 | 59 | | 4/1-5/15 | 0 | | | | | 320 |
| 85 | Cove Springs | 46,40 | 14,877 | 9 | 9 | 9 | | 2/20-5/19 | 9/20-11/30 | C | | | | 40 |
| 86 | Darrell Ind. | 80,00 | 44,400 | 16 | 16 | 16 | | 4/1-5/15 | C | | | | | 80 |
| 87 | Webb Creek FFR | 290,00 | 210,320 | 48 | 48 | 48 | | 5/1-5/31 | C | | | | | 10 |
| 88 | Round Valley FFR | 80,00 | 42,160 | 17 | 17 | 17 | | 1/1-7/31 | C | | | | | 80 |
| 89 | Square Butte | 2,486,24 | 2,589,440 | 670 | 670 | 389 | 350 | 1/741 | 540 | | | | | 1,583 |
| 90 | Sandhill Ind. | 120,00 | 45,800 | 9 | 9 | 10 | | 4/1-5/31 | 0 | | | | | 120 |
| 92 | East Garden Valley | 2,351,79 | 1,259,204 | 574 | 574 | 105 | | 9/6 | 1,452 | | | | | 2,352 |
| 93 | Osceola Ind. | 40,00 | 20,880 | 12 | 12 | 12 | | 4/1-9/30 | 0 | | | | | 40 |
| 94 | Dishner Ind. | 40,00 | 15,720 | 8 | 8 | 10 | | 5/1-9/30 | C | | | | | 0 |
| 95 | Horse Flat | 1,416,71 | 2,700,000 | 356 | 356 | 356 | 62 | 404 | 3,310 | 158 | | | | 1,242 |
| 96 | Isotson | 120,00 | 51,800 | 7 | 7 | 7 | | 4/1-5/31 | C | | | | | 40 |
| 97 | Dunham Ind. | 40,00 | 15,720 | 7 | 7 | 7 | | 4/1-5/31 | C | | | | | 0 |
| 99 | Easin Ind. | 118,24 | 46,200 | 18 | 18 | 18 | | 4/1-5/31 | C | | | | | 0 |
| 99 | Geary Ind. | 1,742,44 | 1,592,760 | 60 | 60 | 60 | | 4/1-7/31 | 0 | | | | | 1,742 |
| 100 | Brownlee | 1,973,72 | 1,424,274 | 286 | 286 | 286 | | 4/1-4-30 | 0 | | | | | 1,771 |
| 101 | Sage Creek | 1,463,88 | 951,880 | 250 | 250 | 250 | 23 | 104 | 11/9 | 446 | | | | 500 |
| 102 | Newbold | 200,00 | 87,200 | 27 | 27 | 27 | | 4/1-5/15 | 0 | | | | | 200 |
| 103 | Farney | 40,00 | 21,440 | 8 | 8 | 8 | | 4/1-6-15 | 0 | | | | | 40 |
| 104 | Big Willow FFR | 808,44 | 440,380 | 187 | 187 | 187 | | 4/1-4-30 | 809 | | | | | 809 |
| 105 | Fisk Ind. | 140,00 | 146,984 | 25 | 25 | 24 | 15 | 1/38 | 7 | | | | | 140 |

| Aliment Number | Aliment Name | Public Land Acres | Estimated Current Production | Pres. Active | Pres. Total | Average License Excess | Good Use | Corridor Fair | Good Use | Season of Use | Class of Livestock | Wild Horses | M Category | C Category | Enrollment Breeders High or Very High | |
|-------------------|---------------------|----------------------|------------------------------------|-----------------|----------------|------------------------------|-------------|------------------|-------------|------------------|-----------------------|----------------|------------------|------------------|--|-------|
| | | | (Pounds) | (A.M.S.) | (A.M.S.) | (A.M.S.) | | | | | C Horse | C Horse | M Maintenance | C Improvement | C Custodial | |
| 106 | Indian Creek | 50.0 | 40,400 | 122 | 121 | 131 | | 5/1 | | 5/1-5/10 | 10/10-10/10 | C | 1 | | 440 | |
| 107 | Indian Creek Co. | 204.19 | 152,040 | 42 | 40 | 40 | | 4 | 100 | | | C | 1 | | 104 | |
| 108 | Ford | 80.00 | 27,444 | 15 | 15 | 15 | | 78 | 1 | 4/16-5/15 | 11/1-11/30 | C | | | 80 | |
| 109 | Long Basin | 7,110.00 | 1,616,880 | 212 | 215 | 245 | | 37 | 1,862 | 234 | 5/1-4/10 | | C | 1 | | 248 |
| 110 | Pravara Ind. | 145.84 | 327,184 | 75 | 75 | 75 | | 123 | 312 | 4 | 4/16-4/10 | | C | | | 243 |
| 111 | Shawn | 160.00 | 77,044 | 33 | 33 | 33 | | | | 4/1-5/1 | C/W | | | | 119 | |
| 112 | Ballant Ind. | 220.00 | 228,240 | 64 | 64 | 64 | | 17 | 187 | 116 | 4/1-5/1 | | C | 1 | | 192 |
| 113 | Justin Fm | 120.00 | 119,262 | 45 | 45 | 46 | | 60 | 240 | | 4/16-4/5 | | C | 1 | | 170 |
| 114 | Ballfield Ind. | 190.20 | 205,480 | 20 | 20 | 20 | | | | 1/1-3/1 | C | | | | 190 | |
| 115 | Packer John | 2,926.42 | 1,591,989 | 450 | 420 | 364 | | 100 | 1,407 | | 2/15-4/14 | | C | 1 | | 2,907 |
| 116 | Patterson & Goodwin | 7,515.61 | 1,852,712 | 188 | 188 | 168 | | 2,516 | | | | | | | 1,516 | |
| 120 | Gossard Ind. | 122.00 | 127,176 | 78 | 78 | 76 | | 71 | 285 | 4 | 5/1-4/15 | 10/16-11/30 | C | | | 425 |
| 121 | Sould Ind. | 140.00 | 142,760 | 34 | 34 | 34 | | 21 | 135 | 5 | 4/1-5/1 | | C | 1 | | 0 |
| 122 | Leop Ind. | 456.24 | 431,200 | 170 | 170 | 171 | | 312 | 444 | | 4/1-7/1 | 9/1-10/30 | C | 1 | | 456 |
| 123 | Greenwood Ind. | 186.00 | 126,180 | 33 | 33 | 33 | | 33 | 127 | 41 | | | C | 1 | | 90 |
| 124 | Butcher Ind. | 40.00 | 27,000 | 8 | 8 | 8 | | | | | 5/1-9/30 | | C | | | 0 |
| 125 | Derham Ind. | 461.42 | 436,136 | 150 | 150 | 150 | | 461 | | | 7/16-10/1 | | C | | | 461 |
| 126 | Hedley Ind. | 200.00 | 70,400 | 26 | 26 | 26 | | 24 | 176 | | 4/12-9/11 | | C/W | | | 200 |
| 127 | Hagan Ind. A | 40.00 | 49,360 | 15 | 15 | 15 | | 2 | 18 | 4 | 4/1-5/1 | 9/1-11/30 | C | | | 40 |
| 128 | Hagan Ind. B | 120.00 | 11,000 | 24 | 24 | 24 | | 2 | 118 | | 4/1-9/30 | | C | | | 120 |
| 129 | Hale Ind. | 120.00 | 66,600 | 24 | 24 | 24 | | | | | 7/16-9/30 | | C | | | 0 |
| 130 | Cross | 221.26 | 238,767 | 12 | 12 | 12 | | | | | 2/15-7/28 | | C | | | 221 |
| 131 | O. Harrington Ind. | 760.00 | 666,600 | 107 | 107 | 107 | | 760 | | | 4/1-11/15 | | C | 1 | | 750 |
| 132 | Homer Ranch | 187.78 | 177,176 | 267 | 263 | 263 | | 40 | 97 | 3 | 4/1-4/20 | 11/1-11/15 | C | | | 187 |
| 137 | Lake Ranch | 980.00 | 1,348,000 | 54 | 54 | 54 | | 189 | 774 | 19 | 4/1-10/15 | | C | | | 980 |
| 134 | J. Harrington Ind. | 200.00 | 275,000 | 19 | 19 | 19 | | 54 | 66 | 9 | 4/16-5/21 | | C | 1 | | 200 |
| 135 | Ind Harrington | 200.00 | 176,024 | 29 | 29 | 29 | | 15 | 175 | 18 | 4/1-6/30 | 10/1-10/30 | C/W | | | 175 |
| 136 | Kenny Ridge | 40.00 | 26,760 | 8 | 8 | 8 | | 6 | 32 | 2 | 4/1-5/15 | | C | | | 40 |
| 137 | Hatched | 40.00 | 22,200 | 8 | 8 | 8 | | 7 | 37 | 3 | 4/1-5/2 | | C | | | 0 |
| 138 | Lil Harrington | 240.00 | 119,840 | 42 | 40 | 42 | | 69 | 149 | 1 | 4/1-5/1 | | C | | | 240 |
| 139 | Lower Field | 1,561.53 | 1,114,824 | 181 | 181 | 181 | | 425 | 927 | 108 | 7/1-12/30 | | C | | | 1,562 |
| 140 | Upper Field | 474.00 | 465,256 | 100 | 100 | 100 | | 79 | 150 | 18 | 5/16-4/15 | | C | | | 474 |
| 141 | Helix Ind. | 237.00 | 224,212 | 38 | 38 | 38 | | 33 | | | 4/1-5/1 | | C | | | 237 |
| 142 | Wolf Creek Rpt. | 1,436.42 | 1,120,360 | 429 | 429 | 399 | | 155 | 1,495 | 30 | 7/1-8/21 | 9/1-10/17 | C | | | 970 |
| 143 | Herrick Fm | 40.00 | 21,080 | 8 | 8 | 8 | | | | | 7/1-8/1 | | C | | | 0 |
| 144 | Higgins Ind. | 140.00 | 48,800 | 27 | 27 | 27 | | 119 | 41 | | 4/16-4/15 | 10/16-11/15 | C | | | 0 |
| 145 | Scott Creek | 7,215.84 | 2,445,720 | 229 | 229 | 229 | | 471 | 1,714 | 402 | 4/1-5/1 | 9/16-11/15 | C | | | 7,215 |
| 146 | Hoffman Ind. | 200.00 | 107,840 | 42 | 42 | 28 | | 120 | 80 | | 4/1-10/31 | | C | 1 | | 0 |
| 147 | Holbrook Ind. | 256.56 | 141,750 | 55 | 55 | 56 | | 200 | 57 | | 4/16-5/30 | | C/W | | | 30 |
| 148 | Indian Mt. Co. | 722.05 | 519,720 | 215 | 215 | 211 | | 101 | 554 | 38 | 4/16-6/30 | 10/16-11/15 | C | | | 724 |
| 149 | Holmes Ind. | 80.00 | 41,640 | 7 | 7 | 7 | | 7 | 38 | 2 | 4/16-5/1 | | C | | | 0 |
| 150 | Hopper Creek | 392.12 | 259,680 | 60 | 60 | 60 | | 200 | 182 | 0 | 4/1-5/25 | | C | 1 | | 0 |
| 151 | Over Creek | 80.00 | 44,760 | 10 | 10 | 10 | | 70 | 10 | | 4/16-5/1 | | C | 1 | | 0 |
| 152 | Hornet Creek | 680.72 | 506,444 | 92 | 92 | 90 | | 129 | 511 | 35 | 4/16-11/30 | | C | | | 165 |
| 153 | Horsing Ind. | 62.00 | 19,277 | 10 | 10 | 7 | | 40 | | | 10/15-1/14 | | C | | | 0 |
| 154 | North | 641.80 | 308,760 | 96 | 96 | 96 | | 147 | 557 | | 4/15-5/1 | | C | 1 | | 55 |
| 155 | South | 980.00 | 576,260 | 190 | 190 | 137 | | 818 | 166 | | 4/15-5/1 | | C | 1 | | 152 |
| 156 | Upper Ranch | 240.00 | 163,280 | 18 | 18 | 18 | | 87 | 148 | 5 | 7/1-12/28 | | C | | | 240 |
| 157 | Hubbard Ind. | 40.00 | 16,440 | 8 | 8 | 8 | | 29 | 11 | | 7/16-11/15 | | C | | | 0 |
| 158 | Jackson Creek | 1,513.91 | 840,440 | 284 | 284 | 288 | | 225 | 1,049 | 204 | 4/10-10/9 | | C | | | 1,440 |
| 159 | Jose | 1,000.00 | 157,240 | 126 | 126 | 176 | | 67 | 555 | 18 | 4/16-4/15 | 10/16-11/30 | C | | | 1,000 |
| 160 | Jacobs Ind. | 40.00 | 24,840 | 8 | 8 | 8 | | 2 | | | 4/1-5/1 | | C | | | 0 |
| 161 | Goodrich Ind. | 2,000.00 | 131,920 | 48 | 48 | 48 | | 59 | 182 | 15 | 4/1-5/1 | 10/1-10/31 | C | | | 240 |
| 162 | Johnson Ind. | 560.00 | 278,720 | 59 | 56 | 56 | | 360 | 360 | | 7/16-4/15 | | C | | | 560 |
| 163 | Kaukan Ind. | 40.31 | 40,440 | 25 | 25 | 26 | | | | 30 | 4/1-5/1 | | C | | | 30 |
| 164 | Kelley Ind. | 1,567.03 | 1,091,256 | 173 | 173 | 173 | | 188 | 1,115 | 249 | 4/10-4/4 | | C | | | 388 |
| 165 | J. Hestley | 900.00 | 949,900 | 101 | 101 | 100 | | 69 | 230 | 67 | 5/1-5/1 | | C | 1 | | 423 |
| 166 | Kennedy Ind. | 47.55 | 29,856 | 11 | 11 | 11 | | 88 | | | 4/1-10/31 | | C | | | 0 |
| 167 | Kilburn Ind. | 160.00 | 141,360 | 33 | 33 | 33 | | 32 | 64 | | 4/1-5/1 | | C | 1 | | 160 |
| 168 | Klimpach Ind. | 80.00 | 28,680 | 16 | 16 | 16 | | 54 | 44 | | 7/16-11/30 | | C | | | 50 |
| 169 | Langer Ind. | 200.00 | 82,240 | 43 | 43 | 43 | | 160 | 60 | | 4/1-7/15 | | C | | | 0 |
| 170 | Little Jackson | 2,449.79 | 1,970,560 | 475 | 475 | 475 | | 772 | 1,428 | 151 | 4/15-12/28 | | C | 1 | | 2,450 |
| 171 | A. Legg Ind. | 40.00 | 25,080 | 6 | 6 | 6 | | 32 | 8 | | 4/1-5/1 | 10/1-10/31 | C | | | 0 |
| 172 | P. Legg Ind. | 40.00 | 29,180 | 8 | 8 | 8 | | 39 | 1 | | 4/16-4/5 | | C | | | 40 |
| 173 | Line Ind. | 40.00 | 42,492 | 8 | 8 | 8 | | | | | 4/16-10/15 | | C | | | 0 |
| 174 | Black Canyon Fence | 80.00 | 75,480 | 14 | 14 | 14 | | | | | 5/1-10/15 | | C | | | 0 |
| 176 | Black Canyon | 4,540.47 | 4,264,940 | 640 | 640 | 640 | | 4,240 | | | 7/16-4/15 | 12/1-12/18 | S | 1 | | 2,050 |
| 177 | Big Flat | 721.57 | 606,240 | 63 | 63 | 63 | | 130 | 592 | | 4/1-6/30 | | C | | | 720 |
| 178 | Paddy Flat | 840.00 | 642,480 | 53 | 53 | 53 | | 840 | 715 | | 4/16-7/15 | | C | 1 | | 840 |
| 179 | Lyle Ind. | 682.48 | 392,080 | 115 | 115 | 115 | | 2 | 481 | | 4/1-5/1 | 11/16-12/15 | C | | | 525 |
| 180 | M.C.A. N. Ind. | 105.00 | 127,710 | 20 | 20 | 20 | | | | | 4/1-5/1 | 11/16-11/15 | C | | | 46 |
| 181 | Black Canyon Ranch | 1,333.33 | 1,361,018 | 180 | 180 | 180 | | 245 | 1,468 | | 4/1-9/30 | | C | 1 | | 1,140 |
| 182 | Soldier Creek Ranch | 44.23 | 24,420 | 8 | 8 | 8 | | 85 | 44 | | 4/1-10/30 | | C | | | 0 |
| 183 | Caberton Ranch | 84.75 | 44,790 | 8 | 8 | 8 | | | | | 7/1-9/30 | | C | | | 0 |
| 184 | Seller Ranch | 207.91 | 107,470 | 28 | 28 | 28 | | 194 | 50 | | 4/1-6/30 | | C | | | 175 |
| 185 | Maddox Ind. | 50.00 | 45,260 | 8 | 8 | 8 | | | | | 4/1-5/1 | | C | | | 18 |
| 186 | Maxwell Ind. | 95.36 | 91,420 | 12 | 12 | 12 | | 9 | 86 | | 4/1-10/30 | | C | | | 55 |
| 187 | Martinez Ind. | 735.00 | 571,680 | 24 | 24 | 24 | | 38 | 709 | | 9/15-12/30 | | C | | | 185 |
| 188 | West Side South | 1,055.00 | 949,480 | 146 | 120 | 146 | | 492 | 512 | | 4/16-5/25 | | C | | | 564 |
| 189 | McCall Ind. | 1,220.00 | 1,240,720 | 87 | 87 | 87 | | 1,120 | | | 4/1-5/1 | | C | 1 | | 1,220 |
| 191 | Linton Creek | 5,629.08 | 4,247,060 | 892 | 892 | 731 | | 250 | 1,114 | 4,510 | 4/1-5/1 | 12/1-12/21 | C | | | 4,756 |
| 192 | McGinnis Ind. | 23.40 | 12,121 | 3 | 3 | 3 | | 23 | | | 5/15-10/15 | | C | | | 0 |
| 194 | McKinnis | 7,120.74 | 4,255,720 | 1,116 | 1,116 | 161 | | 97 | 4,420 | 2,170 | 7/16-11/30 | | C | | | 7,120 |
| 195 | Swan River | 4,222.40 | 299,240 | 92 | 92 | 92 | | 150 | 40 | | 7/16-11/30 | | C | | | 422 |
| 196 | McPherson Ind. | 240.00 | 227,140 | 24 | 24 | 24 | | 240 | | | 4/12-5/21 | | C | | | 240 |
| 197 | Meinhart Ind. | 195.02 | 184,950 | 35 | 35 | 35 | | | | | 5/1-10/31 | 10/1-11/30 | C | | | 195 |
| 198 | Myer Ind. | 120.00 | 80,720 | 16 | 16 | 16 | | 58 | 45 | | 4/1-5/1 | 10/1-11/30 | C | | | 40 |
| 199 | Hart | 80.00 | 49,080 | 9 | 9 | 9 | | 10 | 70 | | 4/16-4/14 | | C | | | 80 |
| 200 | Advent Bulch | 118.77 | 114,280 | 18 | 18 | 18 | | 117 | 2 | | 4/15-9/14 | | C | | | 0 |
| 201 | Mitchell Ind. | 180.00 | 146,160 | 25 | 25 | 25 | | 18 | 162 | | 4/15-5/14 | | C | | | 180 |
| 202 | Long Ace | 270.00 | 150,400 | 12 | 12 | 12 | | | | | 7/16-12/30 | | C | | | 270 |
| 203 | Sage Creek | 2,245.90 | 1,450,488 | 300 | 300 | 300 | | 258 | 1,575 | 457 | 4/16-9/15 | | C | 1 | | 1,662 |
| 204 | Donnet & Stover | 659.14 | 717,560 | 168 | 168 | 168 | | 196 | 302 | 58 | 5/1-11/15 | | C | | | 448 |
| 2 | | | | | | | | | | | | | | | | |

| Aliment Number | Aliment Name | Public Land Acres | Estimated Current Production (Pounds) | Prod. Active (H&S) | Prod. Total (H&S) | Average License Doll (H&S) | Condition Fair Poor Burn Dead | Season of Use | Class of Livestock | Wild Horses | Category | End Date | Notes | | |
|-------------------|----------------------|----------------------|--|--------------------------|-------------------------|-------------------------------------|---|---------------|-----------------------|---------------------|----------|-------------|-------|--------|-----|
| 224 | Roan Ind. | 522.84 | 381,540 | 96 | 96 | 96 | 3 | 520 | 4/1-3/31 | | C | 1 | 172 | | |
| 225 | Indian Head Mts. | 1,487.90 | 994,490 | 152 | 152 | 152 | 376 | 1,559 | 1/1-1/15 4/1-4/15 | | C | 1 | 1,469 | | |
| 226 | Prairie Ind. | 80.00 | 42,280 | 16 | 16 | 15 | 7 | 3 | 6/21-6/20 | | C | 1 | 80 | | |
| 227 | Sagebrush Hill | 888.01 | 624,260 | 175 | 175 | 175 | 211 | 640 | 4/1-5/20 11/1-12/15 | | C | 1 | 880 | | |
| 228 | Shoat | 238.81 | 148,640 | 18 | 18 | 17 | 12 | 117 | 4/1-5/20 11/1-12/15 | | C | 1 | 218 | | |
| 229 | Turkey | 796.00 | 615,150 | 163 | 163 | 163 | 32 | 758 | 4/1-5/20 11/1-12/15 | | C | 1 | 233 | | |
| 230 | Schlesinger Ind. | 563.49 | 292,204 | 199 | 199 | 198 | 52 | 442 | 4/1-5/24 | | C | 1 | 144 | | |
| 231 | Schlesinger Ind. | 1,264.49 | 787,140 | 140 | 140 | 140 | 17 | 176 | 4/1-5/24 | | C | 1 | 176 | | |
| 232 | Hopper Creek | 2,455.00 | 1,907,714 | 215 | 215 | 215 | 589 | 1,938 | 154 | 5/1-5/20 | | C | 1 | 583 | |
| 233 | Mrs. Seld Ind. | 775.00 | 325,440 | 71 | 71 | 74 | 20 | 632 | 102 | 4/1-5/31 | | C | 1 | 29 | |
| 234 | Pine | 2,029.56 | 859,970 | 226 | 226 | 227 | 49 | 1,786 | 114 | 4/1-5/31 | | C | 1 | 27 | |
| 235 | Middle Fork | 488.00 | 311,440 | 80 | 80 | 80 | 78 | 555 | 77 | 4/1-5/31 10/1-11/15 | | C | 1 | 60 | |
| 236 | Black Canyon (Shaw) | 10,471.75 | 9,874,248 | 1,972 | 1,972 | 1,972 | 4,718 | 5,720 | 5/20-5/20 6/21-10/31 | | C | 1 | 6,711 | | |
| 237 | Smelter Cattle Co. | 320.23 | 177,460 | 67 | 67 | 68 | 320 | 4 | 4/1-1/20 | | C | 1 | 40 | | |
| 238 | Slipstick Industries | 40.00 | 27,640 | 12 | 12 | 12 | 40 | 4 | 4/1-4/20 | | C | 1 | 40 | | |
| 239 | Clifford Flat | 1,238.98 | 902,390 | 219 | 219 | 219 | 1,239 | 4 | 4/1-5/31 11/1-12/28 | | C | 1 | 593 | | |
| 240 | Sister Ind. | 40.00 | 26,800 | 10 | 10 | 10 | 2 | 38 | 4/1-6/15 | | C | 1 | 40 | | |
| 241 | Ray Syster | 160.00 | 26,940 | 22 | 22 | 22 | 40 | 120 | 4/1-7/31 10/1-11/20 | | C | 1 | 160 | | |
| 242 | Rocky Ridge | 725.00 | 478,720 | 110 | 110 | 109 | 725 | 1 | 4/1-5/31 11/1-12/15 | | C | 1 | 725 | | |
| 243 | Smith Ind. Allot | 100.00 | 32,254 | 17 | 17 | 21 | 42 | 58 | 4/1-6/15 | | C | 1 | 100 | | |
| 244 | Smith-Black Canyon | 580.00 | 548,880 | 86 | 86 | 86 | 580 | 1 | 4/1-5/31 | | C | 1 | 485 | | |
| 245 | Wilson Ind. | 159.28 | 88,440 | 20 | 20 | 20 | 159 | 2 | 4/1-5/31 | | C | 1 | 159 | | |
| 246 | Hughson Ind. | 566.00 | 437,040 | 114 | 114 | 117 | 566 | 1 | 7/1-8/15 | | C | 1 | 523 | | |
| 247 | Stargill Creek | 6,421.00 | 3,272,524 | 1,285 | 1,285 | 1,285 | 1,138 | 3,558 | 4/1-7/30 11/1-12/31 | | C/D | 1 | 6,421 | | |
| 248 | Squaw Creek | 120.00 | 126,142 | 25 | 25 | 25 | 120 | 3 | 8/1-10/15 | | C | 1 | 120 | | |
| 249 | Willow Creek | 220.00 | 98,120 | 44 | 44 | 40 | 145 | 37 | 4/1-5/31 | | C | 1 | 220 | | |
| 250 | Butte Field | 708.03 | 487,920 | 130 | 130 | 130 | 708 | 490 | 4/1-6/31 10/1-12/31 | | C | 1 | 642 | | |
| 251 | Sand Hollow | 5,160.26 | 4,837,800 | 1,500 | 1,500 | 1,501 | 5 | 3,177 | 1,880 | 4/1-5/31 10/1-12/31 | | C | 1 | 4,562 | |
| 252 | Saltier Ind. | 40.00 | 25,720 | 10 | 10 | 10 | 21 | 16 | 4/1-5/15 9/15-10/15 | | C | 1 | 40 | | |
| 253 | Saltier Ranches Ind. | 40.00 | 25,720 | 10 | 10 | 10 | 21 | 16 | 4/1-5/15 9/15-10/15 | | C | 1 | 40 | | |
| 254 | Thompson Ind. | 40.00 | 15,720 | 5 | 5 | 5 | 36 | 4 | 4/1-5/31 | | C | 1 | 40 | | |
| 255 | Thompson | 280.00 | 155,894 | 56 | 56 | 55 | 25 | 229 | 4/1-5/31 11/1-12/15 | | C | 1 | 87 | | |
| 256 | Thorn | 120.00 | 30,280 | 18 | 18 | 19 | 4 | 112 | 4/1-5/31 | | C | 1 | 120 | | |
| 257 | Drum Creek Ind. | 444.25 | 89,345 | 143 | 143 | 143 | 445 | 58 | 4/1-5/31 11/1-12/15 | | C | 1 | 445 | | |
| 258 | Two Sisters | 3,046.80 | 2,559,240 | 314 | 314 | 314 | 445 | 2,691 | 231 | 4/1-6/15 | | C | 1 | 1,267 | |
| 259 | Vogel & Dgle Ind. | 160.00 | 26,480 | 32 | 32 | 32 | 22 | 142 | 18 | 5/1-5/31 | | C | 1 | 0 | |
| 260 | Wade Ind. | 120.00 | 81,640 | 26 | 26 | 8 | 142 | 8 | 10/1-10/15 | | C | 1 | 0 | | |
| 261 | Walker Ind. | 160.00 | 108,800 | 10 | 10 | 10 | 160 | 30 | 4/1-11/30 | | C | 1 | 160 | | |
| 262 | Watson Ind. | 29.90 | 15,810 | 4 | 4 | 2 | 30 | 1 | 6/1-12/31 | | C | 1 | 30 | | |
| 263 | Wentworth Ind. | 335.58 | 296,976 | 16 | 16 | 16 | 336 | 1 | 4/1-11/30 | | C | 1 | 197 | | |
| 264 | Weger Creek Ind. | 890.82 | 528,338 | 167 | 167 | 167 | 1,035 | 161 | 4/1-5/31 | | C | 1 | 993 | | |
| 265 | Wesley Sheep Co. | 1,438.77 | 869,528 | 212 | 212 | 47 | 209 | 583 | 141 | 4/1-6/15 | | C | 1 | 744 | |
| 266 | Wells Ind. | 120.00 | 164,840 | 23 | 23 | 23 | 28 | 90 | 4/1-6/15 | | C | 1 | 0 | | |
| 267 | Whitman Ind. | 200.00 | 99,280 | 22 | 22 | 22 | 142 | 58 | 4/1-6/15 | | C | 1 | 200 | | |
| 268 | William - Ranchfield | 1,006.49 | 616,864 | 167 | 167 | 167 | 656 | 350 | 4/1-5/14 | | C | 1 | 647 | | |
| 269 | Willowson | 160.00 | 93,440 | 41 | 41 | 41 | 18 | 142 | 4/1-10/31 | | C | 1 | 50 | | |
| 270 | Worland Creek | 340.00 | 211,620 | 93 | 93 | 93 | 267 | 73 | 6/1-6/15 | | C | 1 | 340 | | |
| 271 | Worland Ind. | 120.00 | 87,920 | 22 | 22 | 22 | 120 | 32 | 4/1-10/31 9/1-10/15 | | C | 1 | 120 | | |
| 272 | Woodland Ind. | 770.13 | 661,080 | 128 | 128 | 128 | 34 | 774 | 4/1-6/15 | | C | 1 | 770 | | |
| 273 | Landway Ind. | 200.00 | 125,880 | 40 | 40 | 40 | 60 | 95 | 7 | 4/1-6/15 | | C | 1 | 200 | |
| 274 | Spring Valley | 1,686.54 | 1,229,322 | 739 | 739 | 40 | 7,642 | 1 | 4/1-11/30 | | C/D | 1 | 2,495 | | |
| 275 | Spring Valley | 1,275.50 | 1,317,680 | 496 | 496 | 496 | 3,580 | 1 | 4/1-6/15 12/1-12/15 | | C | 1 | 1,276 | | |
| 276 | Lock Creek | 10,097.15 | 9,494,288 | 1,651 | 1,651 | 1,651 | 490 | 2,134 | 5,721 | 10/1-12/15 | | C | 1 | 9,896 | |
| 277 | Spring Creek | 7,810.95 | 5,967,920 | 1,122 | 1,122 | 1,155 | 615 | 6,598 | 615 | 4/1-10/15 | | C | 1 | 2,660 | |
| 278 | Stardust Ind. | 120.00 | 55,200 | 28 | 28 | 28 | 120 | 10 | 10/1-12/15 | | C | 1 | 0 | | |
| 279 | Stargill Pasture | 1,184.49 | 278,160 | 40 | 40 | 40 | 299 | 9 | 4/1-11/21 | | C | 1 | 0 | | |
| 280 | Double Diamond | 79.66 | 75,480 | 16 | 16 | 16 | 80 | 3 | 7/1-7/20 | | C | 1 | 80 | | |
| 281 | Porter Creek | 80.00 | 75,680 | 15 | 15 | 15 | 80 | 6 | 4/1-6/15 10/1-12/31 | | C | 1 | 0 | | |
| 282 | North Horset | 220.00 | 212,604 | 41 | 41 | 40 | 14 | 211 | 5 | 4/1-6/15 | | C | 1 | 230 | |
| 283 | Horset Creek | 120.00 | 105,614 | 6 | 6 | 6 | 40 | 120 | 4/1-6/15 | | C | 1 | 40 | | |
| 284 | D. Moritz Ind. | 120.00 | 108,320 | 24 | 24 | 24 | 40 | 80 | 4/1-5/31 10/1-11/15 | | C | 1 | 120 | | |
| 285 | North Fork FFR | 440.00 | 247,104 | 90 | 90 | 90 | 42 | 380 | 19 | 4/1-5/31 | | C | 1 | 0 | |
| 286 | W. Star FFR | 571.28 | 322,044 | 81 | 81 | 81 | 15 | 254 | 1 | 4/1-5/31 | | C | 1 | 571 | |
| 287 | Little Valley | 1,192.10 | 2,600,000 | 244 | 232 | 246 | 2,143 | 5,149 | 15/15-10/15-11/14 | | C | 1 | 2,640 | | |
| 288 | Met Gulch | 40.00 | 22,640 | 6 | 6 | 6 | 40 | 3 | 4/1-5/30 | | C | 1 | 40 | | |
| 289 | IS | 897.13 | 568,200 | 147 | 147 | 134 | 820 | 3 | 4/1-11/30 10/1-12/16 | | C | 1 | 302 | | |
| 290 | Co FFR | 120.00 | 214,220 | 56 | 56 | 56 | 11 | 369 | 7/1-11/15 9/1-10/30 | | C | 1 | 120 | | |
| 291 | WFR Ind. | 40.00 | 21,360 | 4 | 4 | 4 | 32 | 8 | 5/1-6/30 | | C | 1 | 40 | | |
| 292 | Holland Gulch | 4,114.14 | 1,320,080 | 557 | 557 | 495 | 4,114 | 6 | 4/1-7/25 8/1-12/15 | | C | 1 | 1,643 | | |
| 293 | Wesley Cove | 380.00 | 214,220 | 56 | 56 | 56 | 11 | 369 | 7/1-11/15 9/1-10/30 | | C | 1 | 380 | | |
| 294 | Snow FFR | 40.00 | 22,560 | 6 | 6 | 11 | 40 | 3 | 7/2-7/28 | | C | 1 | 40 | | |
| 295 | Center Allot. | 4,030.43 | 2,456,760 | 820 | 820 | 742 | 2,248 | 1,614 | 7/25-11/15 | | C/D | 1 | 1,124 | | |
| 296 | Big Creek | 568.00 | 295,120 | 80 | 80 | 80 | 568 | 1 | 4/1-12/31 | | C | 1 | 320 | | |
| 297 | Dr. Lake | 80.00 | 75,680 | 6 | 6 | 210 | 111 | 80 | 4/1-5/31 | | C | 1 | 0 | | |
| 298 | Sky Ranch Ind. | 119.85 | 58,487 | 20 | 20 | 20 | 360 | 1 | 6/15-10/14 | | C | 1 | 0 | | |
| 299 | Besse Front | 5,836.55 | 4,399,072 | 438 | 438 | 361 | 4,427 | 1,950 | 4/1-1/4 | | C | 1 | 5,837 | | |
| 300 | Black Canyon | 16,768.94 | 15,599,140 | 2,629 | 2,629 | 2,529 | 16,769 | 3 | 3/1-5/31 12/1-12/31 | | C | 1 | 1,723 | | |
| 301 | Ne. Ind. | 5,207.99 | 4,780,528 | 1,418 | 1,418 | 1,418 | 5,208 | 1 | 4/1-6/15 10/1-12/24 | | C | 1 | 5,208 | | |
| 302 | Banister Basin | 2,073.08 | 1,161,058 | 266 | 266 | 264 | 2,073 | 1 | 4/1-6/30 | | C | 1 | 2,013 | | |
| 303 | Fleming Place | 80.00 | 58,880 | 13 | 13 | 13 | 80 | 1 | 4/1-10/15 | | C | 1 | 80 | | |
| 304 | Bishop | 40.00 | 29,440 | 14 | 14 | 14 | 40 | 1 | 4/1-11/15 | | C | 1 | 40 | | |
| 305 | Perkins Ind. | 40.00 | 29,440 | 5 | 5 | 5 | 40 | 1 | 4/1-11/31 | | C | 1 | 40 | | |
| 306 | Lucky Peak | 163.84 | 92,000 | 26 | 26 | 26 | 125 | 4 | 4/1-12/15 | | C | 1 | 164 | | |
| 307 | Stephens Ind. | 399.19 | 221,120 | 44 | 44 | 44 | 340 | 59 | 4/1-6/15 | | C/D | 1 | 35 | | |
| 308 | Robert Hutton Ind. | 475.00 | 279,120 | 26 | 26 | 26 | 278 | 4 | 4/1-5/15 11/1-12/15 | | C | 1 | 475 | | |
| 309 | Roberts Ind. | 40.00 | 25,956 | 8 | 8 | 8 | 12 | 28 | 4/1-5/31 11/1-12/15 | | C | 1 | 40 | | |
| 310 | Drum Creek Allot. | 9,804.49 | 5,149,092 | 568 | 568 | 594 | 102 | 6,027 | 3,325 | 7/1-10/20 | | C/D | 1 | 4,154 | |
| 311 | Footbush | 7,797.80 | 6,873,140 | 1,055 | 1,055 | 1,075 | 2,574 | 3,175 | 1,294 | 4/1-6/30 10/1-11/15 | | C | 1 | 5,332 | |
| 312 | Drum Allot. | 276.00 | 186,320 | 48 | 48 | 48 | 276 | 42 | 4/1-5/31 | | C | 1 | 276 | | |
| 313 | Missary Park Ind. | 316.17 | 214,880 | 57 | 57 | 57 | 316 | 2 | 262 | 52 | 6/4-6/15 | | C | 1 | 316 |
| 314 | Dig Creek Allot. | 320.00 | 210,320 | 49 | 49 | 42 | 170 | 150 | 4/1-5/31 11/1-12/15 | | C | 1 | 40 | | |
| 315 | Slater Allot. | 201.25 | 124,820 | 26 | 26 | 26 | 201 | 2 | 4/1-6/15 9/1-10/31 | | C | 1 | 201 | | |
| 316 | Wm. Snyder FFR | 175.00 | 122,400 | 97 | 97 | 81 | 38 | 395 | 4/1-6/30 | | C | 1 | 175 | | |
| 317 | Rock Creek FFR | 1,676.94 | 2,126,220 | 576 | 576 | 576 | 82 | 2,819 | 327 | 7/1-7/28 | | C | 1 | 1,603 | |
| 318 | McDard Butte | 6,815.42 | 5,976,904 | 968 | 968 | 970 | 67 | 4,632 | 2,483 | 4/1-11/20 | | C | 1 | 6,823 | |
| 319 | Upper | 15,473.49 | 9,966,861 | 1,027 | 1,027 | 1,024 | 145 | 8,977 | 6,872 | 4/1-5/31 | | C | 1 | 15,473 | |
| 320 | Callender Ind. | 296.00 | 95,928 | 48 | 48 | 48 | 296 | 2 | 7/1-7/28 | | C | 1 | 260 | | |
| 321 | Ward Spring | 233.00 | 220,418 | | | | | | | | | | | | |

| Allocation Number | Allocation Name | Public Land Acres | Estimated Current Production | Per. Active | Per. Total | Average License Use | Condition | Good | Fair | Poor | Burn | Dead | Season of Use | Class of Livestock | Wild Horses | F | I | C | Erosion Hazard | Acres High or Very High |
|-------------------|-----------------------|-------------------|------------------------------|-------------|------------|---------------------|-----------|--------|---------|---------|-------|--------|---------------|--------------------|--------------------------------------|--|---|---|----------------|-------------------------|
| | | | (Pounds) | (AUM's) | (AUM's) | (AUM's) | | | | | | | | | D = Cattle S = Sheep H = Horse | N = Maintain I = Improve C = Custodial | | | | |
| 387 | Individual | 80,00 | 75,480 | 12 | 12 | 12 | | | | | | 80 | 7/1-12/28 | C | | | | | | 40 |
| 388 | Pedro & Upper Wolf | 205,00 | 184,840 | 20 | 20 | 20 | | | | | | 154 | 5/1-5/30 | C | | | | | | 129 |
| 389 | Long Hollow Field | 1,427.80 | 897,240 | 180 | 180 | 180 | 144 | 451 | 411 | | | | 6/1-6/30 | C | | | | | | 1,724 |
| 390 | Fenced Federal Range | 726.40 | 889,796 | 114 | 114 | 114 | | | | | | 726 | 7/1-7/30 | C | | | | | | 240 |
| 391 | Little Bennett Allot. | 24,022.86 | 22,988,116 | 4,257 | 4,257 | 5,971 | | | | | | 22,870 | 7/1-12/28 | C | | | | | | 6,809 |
| 392 | Fenced Federal Range | 180,00 | 171,280 | 58 | 58 | 60 | | | | | | 180 | 7/1-12/30 | C | | | | | | 58 |
| 393 | Indian Lake | 7,223.81 | 12,126,768 | 3,363 | 3,363 | 3,663 | 929 | 5,457 | 10,787 | | | | 5/1-12/28 | C | | | | | | 8,004 |
| 394 | Bivens Purchase | 206,00 | 205,520 | 34 | 34 | 34 | | | | | | 26 | 4/1-4/30 | C | | | | | | 160 |
| 1,218 | Quartzberg | 2,179.24 | unavailable | 200 | 200 | 0 | | | | | | 2,179 | 7/1-10/31 | C | | | | | | 2,179 |
| 388 | Fenced Federal Range | 120,00 | 108,120 | 124 | 124 | 124 | | | | | | 120 | 7/1-7/30 | C | | | | | | 60 |
| TOTALS | | 664,920.28 | 546,155,326 | 75,571 | 74,662 | 66,424 | 1,522 | 37,281 | 210,315 | 346,729 | 2,274 | 6,730 | | | Wild Horses | M | I | C | Erosion Hazard | Acres High or Very High |

APPENDIX F
LIVESTOCK FORAGE LEVELS

| Allotment Number | Allotment Name | Pref. Active AUM's | Pref. Average Total License AUM's | ALTERNATIVE A | | | | ALTERNATIVE B | | | |
|------------------|---------------------|--------------------|-----------------------------------|---------------------------|-------------------|----------------------------|-------------------|---------------------------|-------------------|----------------------------|-------------------|
| | | | | 5 Year Forage Level AUM's | % Change Increase | 20 Year Forage Level AUM's | % Change Decrease | 5 Year Forage Level AUM's | % Change Increase | 20 Year Forage Level AUM's | % Change Decrease |
| 1 | Pearl Ind. | 10 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | Pinkies Butte | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | Pravalsine | 1,426 | 1,426 | 957 | 0 | 957 | 0 | 947 | (100) | 988 | (100) |
| 4 | Russell Creek | 1,124 | 1,124 | 1,124 | 0 | 1,124 | 0 | 1,021 | 1,065 | 1,065 | 0 |
| 5 | Big Willow Cr. | 4,700 | 4,700 | 3,758 | 0 | 3,758 | 0 | 3,851 | 2 | 4,209 | (15) |
| 6 | Sheep Cr. Cowa | 2,107 | 2,107 | 1,016 | 0 | 1,016 | 0 | 1,174 | 2 | 1,156 | 14 |
| 7 | Toway Carr | 781 | 781 | 567 | 0 | 567 | 0 | 567 | 0 | 591 | 4 |
| 8 | Succor-Nansen Field | 45 | 45 | 45 | 0 | 45 | 0 | 47 | (28) | 49 | (25) |
| 9 | Bute Ranch | 20 | 20 | 20 | 0 | 20 | 0 | 45 | (22) | 135 | (15) |
| 10 | Chacabunga | 175 | 175 | 175 | 0 | 175 | 0 | 146 | (17) | 214 | (22) |
| 11 | Round Valley | 57 | 57 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | Wacoast Ind. | 50 | 50 | 50 | 0 | 50 | 0 | 441 | 26 | 144 | (14) |
| 13 | Wilshorne | 254 | 254 | 247 | 0 | 247 | 0 | 243 | 251 | 251 | 0 |
| 14 | Lower Allot. | 59 | 59 | 59 | 0 | 59 | 0 | 59 | 0 | 62 | 3 |
| 15 | Soodrich Ind. | 37 | 37 | 40 | 0 | 40 | 0 | 1000 | 0 | 1000 | 0 |
| 16 | Soodrich Cowa | 1,117 | 1,096 | 1,096 | 0 | 1,017 | 0 | 1,017 | 1,057 | 1,057 | 0 |
| 17 | County Line | 9 | 9 | 8 | 0 | 8 | 0 | 8 | 100 | 0 | 100 |
| 18 | Ball Ind. | 14 | 14 | 14 | 0 | 14 | 0 | 100 | 0 | 100 | 0 |
| 19 | Sheep Gulch | 228 | 228 | 224 | 0 | 224 | 0 | 152 | (22) | 159 | (29) |
| 20 | Earler Ind. | 74 | 74 | 58 | 0 | 58 | 0 | 100 | 0 | 100 | 0 |
| 21 | Basin Ind. | 245 | 245 | 205 | 0 | 205 | 0 | 210 | 2 | 255 | 24 |
| 22 | Beal Ind. | 12 | 12 | 12 | 0 | 12 | 0 | 100 | 0 | 100 | 0 |
| 23 | Dean Ind. | 25 | 25 | 25 | 0 | 25 | 0 | 25 | 0 | 26 | 4 |
| 24 | Wegus Ind. | 12 | 44 | 12 | 0 | 12 | 0 | 11 | (8) | 12 | 0 |
| 25 | Bettis FFR | 132 | 132 | 132 | 0 | 132 | 0 | 132 | 0 | 138 | 5 |
| 26 | Beates Ind. | 70 | 70 | 70 | 0 | 70 | 0 | 54 | (23) | 56 | (20) |
| 28 | Willwell Ind. | 34 | 34 | 34 | 0 | 34 | 0 | 19 | (39) | 30 | (13) |
| 29 | Biggers Ind. | 30 | 30 | 30 | 0 | 30 | 0 | 15 | (50) | 17 | (42) |
| 30 | West Side North | 777 | 921 | 481 | 0 | 481 | 0 | 470 | (2) | 490 | 2 |
| 31 | Biggers | 12 | 12 | 12 | 0 | 12 | 0 | 12 | 0 | 100 | 0 |
| 32 | Randall | 421 | 421 | 344 | 0 | 344 | 0 | 344 | 0 | 380 | 0 |
| 33 | Camp Creek | 36 | 36 | 36 | 0 | 36 | 0 | 36 | 0 | 36 | 0 |
| 34 | Bilbao Ind. | 8 | 8 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 |
| 35 | Black Canyon Ind. | 152 | 152 | 152 | 0 | 152 | 0 | 212 | 10 | 286 | 42 |
| 36 | Bivens Ind. | 89 | 176 | 141 | 0 | 141 | 0 | 141 | 0 | 147 | 4 |
| 37 | Browlee | 321 | 330 | 327 | 0 | 327 | 0 | 309 | (4) | 322 | (2) |
| 38 | Blossinger Ind. | 24 | 24 | 25 | 0 | 25 | 0 | 25 | 0 | 26 | 4 |
| 39 | Bolt Ind. | 50 | 50 | 51 | 0 | 51 | 0 | 50 | (2) | 52 | 2 |
| 40 | Boyd Ind. | 62 | 62 | 62 | 0 | 62 | 0 | 100 | 0 | 100 | 0 |
| 41 | Granger Butte | 422 | 422 | 427 | 0 | 427 | 0 | 417 | (2) | 474 | (11) |
| 42 | West Crane Ind. | 85 | 85 | 85 | 0 | 85 | 0 | 74 | (12) | 87 | (2) |
| 43 | Indian Valley | 793 | 793 | 1,562 | 0 | 1,562 | 0 | 1,547 | (1) | 1,614 | 5 |
| 44 | Indian Valley Cowa | 719 | 719 | 707 | 0 | 707 | 0 | 707 | 0 | 737 | 4 |
| 45 | Piley Butte | 70 | 70 | 70 | 0 | 70 | 0 | 150 | 11 | 156 | 4 |
| 46 | Branch Ind. | 174 | 174 | 176 | 0 | 176 | 0 | 176 | 0 | 184 | 5 |
| 47 | T. Braun Ind. | 207 | 207 | 138 | 0 | 138 | 0 | 24 | (83) | 25 | (82) |
| 48 | Branthorn Valley | 105 | 105 | 105 | 0 | 105 | 0 | 21 | (80) | 61 | (42) |
| 49 | Holt Braun | 30 | 30 | 30 | 0 | 30 | 0 | 30 | 0 | 30 | 0 |
| 50 | Rudger | 53 | 53 | 54 | 0 | 54 | 0 | 54 | 0 | 100 | 0 |
| 51 | Brant Ind. | 22 | 22 | 22 | 0 | 22 | 0 | 22 | 0 | 23 | 5 |
| 52 | R. Brant Ind. | 42 | 42 | 42 | 0 | 42 | 0 | 42 | 0 | 45 | 5 |
| 53 | Gurshardt Ind. | 32 | 32 | 30 | 0 | 30 | 0 | 9 | (73) | 9 | (70) |
| 54 | Burt Ind. | 4 | 4 | 4 | 0 | 4 | 0 | 4 | 0 | 100 | 0 |
| 55 | Burton Ind. | 47 | 47 | 47 | 0 | 47 | 0 | 47 | 0 | 100 | 0 |
| 56 | Buch Ind. | 225 | 225 | 219 | 0 | 219 | 0 | 219 | 0 | 228 | 0 |
| 57 | Butler & Persons | 42 | 42 | 42 | 0 | 42 | 0 | 0 | 100 | 0 | 100 |
| 58 | Sweet | 24 | 24 | 24 | 0 | 24 | 0 | 0 | 100 | 0 | 100 |
| 59 | Finnie | 658 | 658 | 651 | 0 | 651 | 0 | 639 | (1) | 690 | (49) |
| 60 | West Crane Ind. | 1,349 | 1,459 | 1,200 | 0 | 1,200 | 0 | 1,251 | 4 | 1,440 | 37 |
| 61 | R. Coda Ind. | 35 | 35 | 35 | 0 | 35 | 0 | 100 | 0 | 100 | 0 |
| 62 | Lower Crane | 271 | 271 | 245 | 0 | 245 | 0 | 245 | 0 | 254 | 4 |
| 63 | Lower Crane Cowa | 257 | 257 | 174 | 0 | 174 | 0 | 174 | 0 | 202 | 16 |
| 64 | T. Coda Ind. | 87 | 87 | 87 | 0 | 87 | 0 | 80 | (4) | 83 | 0 |
| 65 | Canaday Ind. | 36 | 36 | 36 | 0 | 36 | 0 | 36 | 0 | 36 | 0 |
| 66 | McNash Ranch | 9 | 9 | 9 | 0 | 9 | 0 | 100 | 0 | 100 | 0 |
| 67 | Carr Ind. | 34 | 34 | 34 | 0 | 34 | 0 | 34 | 0 | 38 | 8 |
| 68 | Mitchell Ind. | 8 | 8 | 8 | 0 | 8 | 0 | 100 | 0 | 100 | 0 |
| 69 | Chandler Ind. | 60 | 60 | 60 | 0 | 60 | 0 | 60 | 0 | 62 | 5 |
| 70 | Cornsteele Ind. | 285 | 285 | 285 | 0 | 285 | 0 | 285 | 0 | 297 | 4 |
| 71 | Clarnson Ind. | 26 | 26 | 26 | 0 | 26 | 0 | 26 | 0 | 27 | 4 |
| 72 | McLadden Ind. | 89 | 89 | 88 | 0 | 88 | 0 | 88 | 11 | 125 | 53 |
| 73 | Clelland | 41 | 41 | 41 | 0 | 41 | 0 | 41 | 25 | 129 | 26 |
| 74 | Coulton FFR | 16 | 16 | 16 | 0 | 16 | 0 | 16 | 100 | 0 | 100 |
| 75 | Cove | 80 | 80 | 65 | 0 | 65 | 0 | 89 | 27 | 165 | (54) |
| 76 | Cove Creek | 112 | 112 | 111 | 0 | 111 | 0 | 111 | 0 | 116 | 5 |
| 77 | Cove Ind. | 47 | 47 | 47 | 0 | 47 | 0 | 47 | 0 | 49 | 4 |
| 78 | Fruitvale | 158 | 158 | 130 | 0 | 130 | 0 | 130 | 0 | 134 | 5 |
| 79 | Crags Ind. | 6 | 6 | 6 | 0 | 6 | 0 | 6 | 0 | 100 | 0 |
| 80 | Crags Ind. | 39 | 39 | 39 | 0 | 39 | 0 | 39 | 0 | 100 | 0 |
| 81 | Fruitvale Blenn | 9 | 9 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 |
| 82 | J. Craig Ind. | 144 | 144 | 144 | 0 | 144 | 0 | 145 | 15 | 225 | 63 |
| 83 | West Ind. Allot. | 126 | 126 | 126 | 0 | 126 | 0 | 168 | (14) | 113 | (10) |
| 84 | Cassridge | 88 | 88 | 88 | 0 | 88 | 0 | 81 | (8) | 84 | (3) |
| 85 | Cruickshank Ind. | 113 | 113 | 113 | 0 | 113 | 0 | 112 | 0 | 150 | 33 |
| 86 | Dahne | 59 | 59 | 59 | 0 | 59 | 0 | 59 | 0 | 62 | 5 |
| 87 | Cove Springs | 9 | 9 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 |
| 88 | Gurnell Ind. | 16 | 16 | 16 | 0 | 16 | 0 | 16 | 0 | 100 | 0 |
| 89 | Webb Creek FFR | 48 | 48 | 48 | 0 | 48 | 0 | 48 | 0 | 50 | 4 |
| 90 | Round Valley FFR | 17 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 91 | Squaw Butte | 470 | 470 | 389 | 0 | 389 | 0 | 284 | 54 | 404 | 4 |
| 92 | East Garden Valley | 374 | 374 | 105 | 0 | 105 | 0 | 118 | 12 | 167 | 55 |
| 93 | Gickerson Ind. | 12 | 12 | 12 | 0 | 12 | 0 | 12 | 0 | 100 | 0 |
| 94 | Gickerson Ind. | 8 | 8 | 12 | 0 | 12 | 0 | 100 | 0 | 100 | 0 |
| 95 | Horse Flat | 356 | 356 | 356 | 0 | 356 | 0 | 356 | 0 | 371 | 4 |
| 96 | Olson | 7 | 7 | 7 | 0 | 7 | 0 | 2 | (73) | 2 | (73) |
| 97 | Orshaw Ind. | 7 | 7 | 7 | 0 | 7 | 0 | 7 | 0 | 100 | 0 |
| 98 | Eskin Ind. | 18 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 100 | 0 |
| 99 | Esrey Ind. | 60 | 60 | 60 | 0 | 60 | 0 | 60 | 0 | 63 | 5 |
| 100 | Browlee | 286 | 286 | 286 | 0 | 286 | 0 | 286 | (76) | 72 | (74) |
| 101 | Sage Creek | 250 | 250 | 250 | 0 | 250 | 0 | 250 | 0 | 261 | 4 |
| 102 | Newbold | 27 | 27 | 25 | 0 | 25 | 0 | 100 | 0 | 100 | 0 |
| 103 | Farness | 8 | 8 | 8 | 0 | 8 | 0 | 8 | 0 | 9 | 13 |
| 104 | Big Willow FFR | 187 | 187 | 187 | 0 | 187 | 0 | 187 | 0 | 187 | 0 |
| 105 | Fish Ind. | 25 | 25 | 14 | 0 | 14 | 0 | 14 | 0 | 100 | 0 |
| 106 | Indian Creek | 132 | 132 | 131 | 0 | 131 | 0 | 131 | 0 | 137 | 5 |
| 107 | Indian Creek C. | 40 | 40 | 40 | 0 | 40 | 0 | 24 | (40) | 25 | (38) |

| Allotment Number | ALTERNATIVE C | | | | ALTERNATIVE D | | | | ALTERNATIVE E | | | |
|------------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|-----------------------|-----------------|
| | 5-Year | | 20 Year | | 5-Year | | 20 Year | | 5-Year | | 20 Year | |
| | Forage Level AUM's | Change (+/-) | Forage Level AUM's | Change (+/-) | Forage Level AUM's | Change (+/-) | Forage Level AUM's | Change (+/-) | Forage Level AUM's | Change (+/-) | Forage Level AUM's | Change (+/-) |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 154 | 388 | 188 | 590 | 109 | 88 | 118 | 117 | 210 | 0 | 0 | 0 (100) |
| 3 | 693 | 280 | 728 | 947 | (1) | 1,002 | (1) | 951 | 0 | 0 | 984 | 3 |
| 4 | 918 | (27) | 819 | (22) | 1,071 | 1,071 | 1,071 | 1,071 | 1,134 | 1,134 | 1,134 | 7 |
| 5 | 2,804 | (25) | 3,126 | (17) | 2,829 | 4 | 4,329 | 20 | 1,758 | 0 | 1,758 | 6 |
| 6 | 757 | (25) | 829 | (17) | 1,050 | 3 | 1,211 | 19 | 1,016 | 0 | 1,050 | 3 |
| 7 | 414 | (27) | 435 | (25) | 587 | 0 | 603 | 6 | 587 | 0 | 571 | 7 |
| 8 | 47 | (28) | 48 | (25) | 47 | 124 | 50 | 123 | 145 | 145 | 62 | (5) |
| 9 | 33 | 65 | 350 | 80 | 200 | 179 | 795 | 21 | 98 | 290 | 98 | 290 |
| 10 | 141 | (19) | 187 | 7 | 188 | 7 | 237 | 35 | 175 | 0 | 221 | 26 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 0 | 57 | 6 |
| 12 | 56 | (28) | 28 | (24) | 27 | (46) | 29 | (42) | 58 | 0 | 57 | 6 |
| 13 | 175 | (13) | 184 | (28) | 243 | (4) | 257 | 1 | 247 | 0 | 204 | (20) |
| 14 | 40 | 171 | 45 | (24) | 59 | 0 | 62 | 5 | 59 | 0 | 55 | (7) |
| 15 | 29 | 128 | 31 | 0 | 0 | (100) | 43 | 0 | 43 | 0 | 43 | 5 |
| 16 | 717 | 353 | 752 | (31) | 1,013 | (8) | 1,072 | (21) | 1,013 | 0 | 1,074 | (21) |
| 17 | 6 | (25) | 6 | (25) | 4 | (50) | 4 | (50) | 9 | 0 | 0 | (100) |
| 18 | 19 | (29) | 11 | (31) | 0 | (100) | 7 | 14 | 0 | 14 | 0 | (100) |
| 19 | 144 | (27) | 172 | (25) | 150 | (22) | 147 | (28) | 224 | 0 | 161 | (28) |
| 20 | 42 | (28) | 44 | (24) | 0 | (100) | 0 | (100) | 58 | 0 | 57 | (2) |
| 21 | 158 | (22) | 188 | 9 | 215 | 5 | 278 | 34 | 205 | 0 | 247 | 19 |
| 22 | 9 | 25 | 10 | (17) | 0 | (100) | 0 | 12 | 0 | 12 | 0 | (100) |
| 23 | 18 | (28) | 19 | (24) | 25 | 0 | 27 | 8 | 25 | 0 | 25 | 0 |
| 24 | 8 | (33) | 8 | (33) | 11 | (8) | 12 | 0 | 12 | 0 | 7 | (42) |
| 25 | 179 | 6 | 101 | (23) | 132 | 0 | 140 | 8 | 172 | 0 | 177 | 14 |
| 26 | 51 | (27) | 54 | (23) | 54 | (23) | 50 | (19) | 70 | 0 | 64 | (6) |
| 27 | 19 | (47) | 20 | (44) | 29 | (19) | 31 | (14) | 36 | 0 | 29 | (19) |
| 28 | 22 | (27) | 23 | (23) | 15 | (50) | 16 | (47) | 30 | 0 | 36 | 0 |
| 29 | 351 | (27) | 349 | (23) | 407 | (21) | 459 | 48 | 440 | 0 | 499 | 57 |
| 30 | 9 | 25 | 10 | (17) | 0 | (100) | 0 | (100) | 12 | 0 | 12 | 0 |
| 31 | 2 | 266 | 279 | (25) | 364 | 0 | 380 | 6 | 364 | 0 | 363 | (1) |
| 32 | 149 | 0 | 12 | (47) | 58 | 0 | 58 | 0 | 58 | 0 | 56 | 0 |
| 33 | 0 | (100) | 0 | (100) | 0 | 0 | 9 | 13 | 8 | 0 | 8 | 0 |
| 34 | 118 | (39) | 153 | (20) | 197 | 3 | 216 | 65 | 192 | 0 | 258 | 34 |
| 35 | 103 | (27) | 106 | (25) | 141 | 0 | 149 | 6 | 149 | 0 | 149 | 6 |
| 36 | 230 | (30) | 242 | (24) | 308 | (6) | 327 | 22 | 307 | 0 | 247 | 6 |
| 37 | 0 | (100) | 0 | (100) | 25 | 0 | 27 | 6 | 25 | 0 | 25 | 0 |
| 38 | 37 | (27) | 39 | (24) | 50 | (2) | 51 | 4 | 51 | 0 | 47 | (8) |
| 39 | 45 | (27) | 47 | (24) | 0 | (100) | 0 | (100) | 0 | 0 | 62 | 0 |
| 40 | 126 | (26) | 161 | (15) | 422 | (1) | 563 | 18 | 427 | 0 | 478 | 11 |
| 41 | 18 | 99 | 15 | 97 | 14 | 158 | 86 | 85 | 0 | 127 | 49 | 0 |
| 42 | 1,841 | (27) | 1,198 | (27) | 1,547 | (3) | 1,428 | 5 | 1,562 | 0 | 1,441 | 5 |
| 43 | 176 | 3029 | 329 | (25) | 0 | (100) | 6 | 787 | 0 | 787 | 0 | 0 |
| 44 | 73 | (19) | 96 | 7 | 105 | 17 | 155 | 72 | 9 | 0 | 125 | 39 |
| 45 | 66 | (63) | 69 | (61) | 176 | 0 | 186 | 6 | 176 | 0 | 186 | 6 |
| 46 | 101 | (27) | 106 | (23) | 114 | (17) | 121 | (22) | 138 | 0 | 146 | 6 |
| 47 | 85 | 179 | 8 | 124 | 38 | 186 | 105 | 77 | 105 | 0 | 168 | 41 |
| 48 | 22 | (27) | 23 | (23) | 30 | 0 | 32 | 7 | 30 | 0 | 32 | 7 |
| 49 | 39 | (28) | 41 | (24) | 0 | (100) | 0 | (100) | 54 | 0 | 0 | (100) |
| 50 | 17 | (27) | 17 | (23) | 22 | 6 | 23 | 5 | 22 | 0 | 22 | 0 |
| 51 | 34 | (24) | 34 | (21) | 42 | 0 | 46 | 7 | 42 | 0 | 42 | 0 |
| 52 | 22 | (27) | 23 | (23) | 9 | (70) | 10 | (67) | 31 | 0 | 29 | (3) |
| 53 | 5 | 251 | 7 | (25) | 0 | (100) | 0 | (100) | 4 | 0 | 0 | (100) |
| 54 | 28 | (28) | 26 | (23) | 17 | (72) | 14 | (70) | 17 | 0 | 47 | 0 |
| 55 | 160 | (27) | 168 | (23) | 219 | 0 | 232 | 6 | 219 | 0 | 213 | (3) |
| 56 | 41 | (5) | 70 | 63 | 0 | (100) | 0 | (100) | 42 | 0 | 83 | 92 |
| 57 | 18 | (25) | 19 | (21) | 0 | (100) | 0 | (100) | 24 | 0 | 0 | (100) |
| 58 | 164 | 504 | 504 | (20) | 2 | 641 | 13 | 713 | 431 | 0 | 56 | 0 |
| 59 | 60 | 944 | 1,200 | 0 | 1,254 | 13 | 1,402 | 59 | 1,200 | 0 | 1,254 | 27 |
| 60 | 26 | (26) | 27 | (23) | 0 | (100) | 0 | (100) | 25 | 0 | 25 | 0 |
| 61 | 179 | (27) | 188 | (23) | 245 | 0 | 254 | 6 | 245 | 0 | 277 | 13 |
| 62 | 170 | (25) | 146 | (18) | 182 | 5 | 214 | 23 | 174 | 0 | 270 | 35 |
| 63 | 61 | (27) | 64 | (23) | 82 | 0 | 88 | 6 | 82 | 0 | 70 | (16) |
| 64 | 24 | (26) | 27 | (23) | 36 | 0 | 38 | 6 | 36 | 0 | 38 | 6 |
| 65 | 7 | (22) | 7 | (22) | 0 | (100) | 0 | (100) | 9 | 0 | 0 | (100) |
| 66 | 25 | (26) | 26 | (24) | 34 | 0 | 36 | 6 | 34 | 0 | 34 | 0 |
| 67 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 68 | (27) | 46 | (23) | 63 | 63 | 6 | 64 | 7 | 60 | 0 | 56 | (7) |
| 69 | 208 | (27) | 218 | (24) | 285 | 0 | 302 | 6 | 285 | 0 | 280 | (2) |
| 70 | 19 | (27) | 20 | (23) | 26 | 0 | 28 | 8 | 26 | 0 | 26 | 0 |
| 71 | 60 | (32) | 63 | (28) | 103 | 17 | 153 | 74 | 68 | 0 | 119 | 35 |
| 72 | 5 | (88) | 5 | (88) | 25 | (29) | 27 | (24) | 41 | 0 | 41 | 0 |
| 73 | 12 | (25) | 12 | (19) | 0 | (100) | 0 | (100) | 24 | 0 | 0 | (100) |
| 74 | 62 | (5) | 109 | 68 | 99 | 52 | 204 | 214 | 65 | 0 | 136 | 109 |
| 75 | 81 | (27) | 85 | (23) | 111 | 0 | 118 | 6 | 111 | 0 | 103 | (7) |
| 76 | 14 | (28) | 36 | (23) | 47 | 0 | 50 | 6 | 47 | 0 | 47 | 0 |
| 77 | 0 | (100) | 0 | (100) | 130 | 0 | 138 | 6 | 130 | 0 | 138 | 6 |
| 78 | 5 | (17) | 5 | (17) | 0 | (100) | 0 | (100) | 9 | 0 | 0 | (100) |
| 79 | 29 | (24) | 30 | 0 | 0 | (100) | 0 | (100) | 39 | 0 | 0 | (100) |
| 80 | 0 | (100) | 0 | (100) | 9 | 0 | 10 | 11 | 9 | 0 | 9 | 0 |
| 81 | 118 | (18) | 163 | 13 | 174 | 21 | 272 | 89 | 144 | 0 | 208 | 44 |
| 82 | 177 | (27) | 97 | (23) | 168 | (14) | 114 | (10) | 176 | 0 | 126 | 0 |
| 83 | 44 | (27) | 47 | (24) | 86 | (2) | 86 | 88 | 121 | 0 | 86 | 0 |
| 84 | 77 | (32) | 67 | (35) | 123 | 9 | 165 | 46 | 113 | 0 | (47) | 27 |
| 85 | 43 | (27) | 45 | (24) | 54 | 0 | 62 | 5 | 59 | 0 | 59 | 0 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | 12 | (25) | 13 | (19) | 0 | (100) | 0 | (100) | 16 | 0 | 0 | (100) |
| 88 | 35 | (27) | 37 | (23) | 48 | 0 | 51 | 6 | 48 | 0 | 46 | (4) |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 100 | 17 | 100 |
| 90 | 284 | (27) | 298 | (23) | 389 | 0 | 412 | 6 | 389 | 0 | 389 | 0 |
| 91 | 7 | (30) | 7 | (30) | 10 | 0 | 11 | 10 | 10 | 0 | 10 | 0 |
| 92 | 25 | (74) | 114 | 9 | 124 | 18 | 186 | 77 | 105 | 0 | 148 | 41 |
| 93 | 259 | 10 | 10 | (17) | 0 | (100) | 0 | (100) | 12 | 0 | 12 | 0 |
| 94 | 7 | (30) | 7 | (30) | 0 | (100) | 0 | (100) | 10 | 0 | 0 | (100) |
| 95 | 260 | (27) | 272 | (23) | 356 | 0 | 377 | 6 | 356 | 0 | 377 | 6 |
| 96 | 6 | (14) | 6 | (14) | 2 | (71) | 3 | (57) | 7 | 0 | 2 | (71) |
| 97 | 8 | (14) | 8 | (14) | 0 | (100) | 0 | (100) | 7 | 0 | 0 | (100) |
| 98 | 13 | (28) | 14 | (23) | 0 | (100) | 0 | (100) | 18 | 0 | 0 | (100) |
| 99 | 64 | (27) | 66 | (23) | 60 | 0 | 64 | 7 | 60 | 0 | 63 | 5 |
| 100 | 100 | (10) | 0 | 70 | (74) | 74 | 74 | 74 | 26 | 0 | 53 | (81) |
| 101 | 183 | (27) | 192 | (23) | 250 | 0 | 265 | 6 | 245 | 0 | 247 | (1) |
| 102 | 18 | (28) | 19 | (24) | 0 | (100) | 0 | (100) | 25 | 0 | 25 | 0 |
| 103 | 7 | (13) | 7 | (13) | 8 | 0 | 9 | 13 | 8 | 0 | 8 | 0 |
| 104 | 127 | (27) | 144 | (23) | 0 | (100) | 0 | (100) | 167 | 0 | 0 | (100) |
| 105 | 11 | (21) | 17 | 21 | 0 | (100) | 0 | (100) | 14 | 0 | 15 | 7 |
| 106 | 96 | (27) | 101 | (23) | 131 | 0 | 139 | 6 | 131 | 0 | 126 | 6 |
| 107 | 29 | (28) | 30 | (25) | 24 | (40) | 25 | (38) | 40 | 0 | 24 | (40) |

| Allocation Number | ALTERNATIVE C | | | | ALTERNATIVE D | | | | ALTERNATIVE E | | | |
|-------------------|-----------------------------|----------------------|------------------------------|----------------------|-----------------------------|----------------------|------------------------------|----------------------|-----------------------------|----------------------|------------------------------|----------------------|
| | 5-Year Force Level AUM's | Change (Increase) | 20-Year Force Level AUM's | Change (Increase) | 5-Year Force Level AUM's | Change (Increase) | 20-Year Force Level AUM's | Change (Increase) | 5-Year Force Level AUM's | Change (Increase) | 20-Year Force Level AUM's | Change (Increase) |
| 108 | 11 | (27) | 12 | (20) | 15 | 0 | 18 | 7 | 15 | 0 | 25 | 0 |
| 109 | 179 | (27) | 188 | (23) | 240 | 0 | 259 | 4 | 245 | 0 | 245 | 0 |
| 110 | 1101 | 0 | 0 | (100) | 84 | (12) | 76 | (17) | 15 | 0 | 14 | (15) |
| 111 | 24 | (27) | 25 | (24) | 0 | (100) | 0 | (100) | 32 | 0 | 9 | (10) |
| 112 | 47 | (27) | 49 | (23) | 0 | (100) | 0 | (100) | 64 | 0 | 68 | 6 |
| 113 | 154 | (24) | 164 | (22) | 46 | 0 | 49 | 7 | 46 | 0 | 46 | 0 |
| 114 | 125 | 15 | 14 | (20) | 18 | 0 | 21 | 5 | 20 | 0 | 20 | 0 |
| 115 | 268 | (27) | 279 | (27) | 364 | 0 | 385 | 6 | 364 | 0 | 364 | 0 |
| 116 | 123 | (27) | 129 | (27) | 168 | 0 | 178 | 6 | 168 | 0 | 178 | 6 |
| 120 | 881 | 0 | 9 | (88) | 76 | 0 | 80 | 76 | 5 | 0 | 76 | 0 |
| 121 | 25 | (24) | 26 | (24) | 0 | (100) | 0 | (100) | 24 | 0 | 0 | (10) |
| 122 | 23 | (24) | 24 | (23) | 31 | 0 | 33 | 6 | 31 | 0 | 29 | (6) |
| 123 | (27) | 24 | 25 | (24) | 0 | (100) | 0 | (100) | 32 | 0 | 32 | 0 |
| 124 | 4 | (20) | 4 | (20) | 0 | (100) | 0 | (100) | 5 | 0 | 0 | (10) |
| 125 | 110 | (27) | 116 | (23) | 150 | 0 | 159 | 6 | 150 | 0 | 150 | 0 |
| 126 | 19 | (27) | 20 | (23) | 26 | 0 | 28 | 8 | 26 | 0 | 25 | (4) |
| 127 | 11 | (27) | 12 | (20) | 0 | (100) | 0 | (100) | 15 | 0 | 15 | 0 |
| 128 | 19 | (25) | 19 | (23) | 0 | (100) | 0 | (100) | 24 | 0 | 24 | 0 |
| 129 | 19 | (25) | 19 | (23) | 24 | 0 | 25 | 4 | 24 | 0 | 24 | 0 |
| 130 | 9 | (25) | 9 | (25) | 12 | 0 | 12 | 8 | 12 | 0 | 11 | (8) |
| 131 | 0 | (100) | 0 | (100) | 107 | 0 | 113 | 6 | 107 | 0 | 113 | 6 |
| 132 | 88 | (67) | 92 | (65) | 150 | (43) | 151 | (40) | 263 | 0 | 159 | (40) |
| 133 | 39 | (18) | 41 | (24) | 58 | (48) | 30 | (44) | 54 | 0 | 57 | 6 |
| 134 | 881 | 2 | 881 | 2 | 11 | (88) | 12 | (12) | 18 | 0 | 18 | 0 |
| 135 | 4 | (86) | 4 | (86) | 23 | (23) | 24 | (17) | 29 | 0 | 27 | (21) |
| 136 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 137 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 8 | 0 |
| 138 | 0 | (100) | 0 | (100) | 42 | 5 | 44 | 5 | 42 | 0 | 42 | 0 |
| 139 | 0 | (100) | 0 | (100) | 11 | (94) | 12 | (93) | 181 | 0 | 181 | 0 |
| 140 | 35 | (65) | 37 | (63) | 62 | (38) | 68 | (41) | 100 | 0 | 50 | (50) |
| 141 | 24 | (27) | 25 | (24) | 33 | 0 | 35 | 32 | 6 | 0 | 33 | 0 |
| 142 | 291 | (27) | 304 | (23) | 399 | 0 | 422 | 6 | 399 | 0 | 405 | 2 |
| 143 | 0 | (100) | 0 | (100) | 8 | 0 | 9 | 13 | 8 | 0 | 8 | 0 |
| 144 | 20 | (24) | 21 | (22) | 27 | 0 | 29 | 7 | 27 | 0 | 29 | 0 |
| 145 | 489 | (27) | 514 | (24) | 544 | (19) | 568 | (15) | 447 | 0 | 477 | 1 |
| 146 | 21 | (25) | 22 | (21) | 0 | (100) | 0 | (100) | 28 | 0 | 27 | (4) |
| 147 | 41 | (27) | 43 | (23) | 21 | (63) | 22 | (61) | 36 | 0 | 34 | (4) |
| 148 | 147 | (27) | 162 | (23) | 202 | (4) | 214 | 11 | 211 | 0 | 218 | 7 |
| 149 | 5 | (27) | 5 | (27) | 7 | 0 | 7 | 7 | 7 | 0 | 7 | 0 |
| 150 | 52 | (15) | 59 | 32 | 78 | 30 | 138 | (30) | 60 | 0 | 96 | 60 |
| 151 | 7 | (22) | 7 | (22) | 9 | 0 | 10 | 11 | 9 | 0 | 6 | 0 |
| 152 | 39 | 58 | 58 | (34) | 85 | (64) | 90 | (2) | 90 | 0 | 86 | 0 |
| 153 | 5 | (29) | 5 | (29) | 0 | (100) | 0 | (100) | 7 | 0 | 0 | (100) |
| 154 | 70 | (27) | 74 | (23) | 96 | 0 | 102 | 6 | 96 | 0 | 101 | 5 |
| 155 | 100 | (27) | 105 | (23) | 137 | 0 | 145 | 6 | 137 | 0 | 145 | 6 |
| 156 | 14 | (28) | 14 | (22) | 0 | (100) | 0 | (100) | 18 | 0 | 18 | 0 |
| 157 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 158 | 291 | 259 | 330 | (15) | 406 | 5 | 486 | 25 | 378 | 0 | 448 | 15 |
| 159 | 0 | (100) | 0 | (100) | 126 | 5 | 133 | 6 | 126 | 0 | 126 | 0 |
| 160 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 8 | 0 |
| 161 | 35 | (27) | 37 | (23) | 48 | 0 | 51 | 6 | 48 | 0 | 48 | 0 |
| 162 | 46 | (18) | 61 | 15 | 54 | (4) | 52 | (4) | 56 | 0 | 60 | 43 |
| 163 | 121 | (27) | 126 | (23) | 0 | (100) | 0 | (100) | 26 | 0 | 26 | 0 |
| 164 | 126 | (27) | 132 | (24) | 173 | 0 | 182 | 6 | 173 | 0 | 166 | (4) |
| 165 | 13 | (27) | 17 | (23) | 100 | 0 | 106 | 6 | 100 | 0 | 95 | (15) |
| 166 | 7 | (30) | 7 | (30) | 10 | 0 | 10 | 10 | 10 | 0 | 10 | 0 |
| 167 | 16 | (52) | 17 | (48) | 33 | 0 | 35 | 4 | 33 | 0 | 33 | 0 |
| 168 | 12 | (25) | 13 | (19) | 16 | 0 | 17 | 6 | 16 | 0 | 16 | 0 |
| 169 | 32 | (26) | 34 | (21) | 34 | (21) | 36 | (16) | 42 | 0 | 34 | (21) |
| 170 | 193 | 37 | 197 | (27) | 144 | (76) | 152 | (48) | 175 | 0 | 174 | (12) |
| 171 | 2 | (33) | 2 | (33) | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 |
| 172 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 8 | 0 |
| 173 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 174 | 10 | (29) | 11 | (21) | 14 | 0 | 15 | 7 | 14 | 0 | 14 | 0 |
| 176 | 539 | 164 | 777 | 21 | 801 | 25 | 1,022 | 107 | 640 | 0 | 955 | 55 |
| 177 | 46 | (27) | 48 | (24) | 21 | (67) | 22 | (65) | 67 | 0 | 58 | (50) |
| 178 | 0 | (100) | 0 | (100) | 53 | 0 | 56 | 53 | 6 | 0 | 53 | 0 |
| 179 | 26 | (77) | 35 | (70) | 40 | (48) | 81 | (30) | 55 | 0 | 44 | (44) |
| 180 | 15 | (25) | 16 | (20) | 20 | 0 | 21 | 5 | 20 | 0 | 20 | 0 |
| 181 | 131 | (27) | 138 | (23) | 180 | 0 | 191 | 6 | 180 | 0 | 191 | 6 |
| 182 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 183 | 6 | (25) | 6 | (25) | 0 | 0 | 9 | 13 | 8 | 0 | 8 | 0 |
| 184 | 21 | (25) | 22 | (21) | 28 | 0 | 30 | 7 | 28 | 0 | 28 | 0 |
| 185 | 25 | 6 | 6 | (25) | 8 | 0 | 9 | 13 | 8 | 0 | 8 | 0 |
| 186 | 9 | (25) | 10 | (17) | 0 | (100) | 0 | (100) | 42 | 0 | 0 | (100) |
| 187 | 10 | (23) | 11 | (15) | 13 | 0 | 14 | 8 | 13 | 0 | 9 | (38) |
| 188 | 115 | (21) | 140 | (1) | 164 | 12 | 230 | 58 | 16 | 0 | 177 | 21 |
| 189 | 17 | (27) | 18 | (15) | 105 | 25 | 127 | 82 | 87 | 0 | 128 | 48 |
| 191 | 521 | (27) | 547 | (23) | 713 | 0 | 755 | 6 | 713 | 0 | 756 | 6 |
| 193 | 2 | (33) | 2 | (33) | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 |
| 194 | (27) | 702 | 717 | (23) | 851 | (14) | 889 | (6) | 963 | 0 | 939 | (21) |
| 195 | 68 | (24) | 71 | (23) | 92 | 0 | 97 | 5 | 92 | 0 | 88 | (4) |
| 196 | 33 | (3) | 39 | 74 | 52 | 53 | 111 | 226 | 14 | 0 | 73 | 115 |
| 197 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 100 | 35 | 100 |
| 198 | 112 | (25) | 117 | (19) | 5 | 5 | 14 | 5 | 14 | 0 | 5 | (69) |
| 199 | 6 | (25) | 6 | (25) | 0 | (100) | 0 | (100) | 8 | 0 | 0 | (100) |
| 200 | 13 | (28) | 14 | (22) | 6 | (67) | 6 | (67) | 18 | 0 | 18 | 0 |
| 201 | 280 | 19 | 244 | 0 | 25 | 6 | 26 | 26 | 4 | 0 | 24 | (4) |
| 202 | 7 | (42) | 7 | (42) | 10 | (17) | 11 | (86) | 10 | 0 | 9 | (25) |
| 203 | 219 | (27) | 230 | (23) | 390 | 0 | 418 | 6 | 390 | 0 | 293 | (29) |
| 204 | 123 | (27) | 129 | (23) | 133 | (21) | 141 | (16) | 188 | 0 | 159 | (15) |
| 205 | 124 | (41) | 141 | (23) | 162 | (12) | 171 | 17 | 164 | 0 | 176 | 3 |
| 206 | 53 | (24) | 56 | (22) | 0 | (100) | 0 | (100) | 72 | 0 | 76 | 6 |
| 207 | 0 | (100) | 0 | (100) | 538 | (21) | 570 | (17) | 684 | 0 | 690 | 1 |
| 208 | (27) | 266 | 266 | (23) | 268 | 0 | 294 | 6 | 268 | 0 | 240 | (10) |
| 209 | 235 | (25) | 291 | (8) | 270 | (14) | 385 | 54 | 254 | 0 | 336 | 7 |
| 210 | 6 | (25) | 6 | (25) | 8 | 0 | 9 | 13 | 8 | 0 | 7 | (13) |
| 211 | 3 | (25) | 3 | (25) | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 |
| 212 | 36 | (24) | 36 | (23) | 0 | (100) | 0 | (100) | 6 | 29 | 37 | 159 |
| 213 | 0 | (100) | 0 | (100) | 65 | 0 | 69 | 6 | 65 | 0 | 65 | 0 |
| 214 | 60 | (27) | 63 | (23) | 82 | 0 | 87 | 6 | 82 | 0 | 82 | 1 |
| 215 | 24 | (27) | 25 | (24) | 26 | (23) | 28 | (15) | 33 | 0 | 24 | (27) |
| 216 | (27) | 84 | (27) | (23) | 82 | (27) | 87 | (24) | 115 | 0 | 94 | (11) |
| 217 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 100 | 9 | 100 |
| 218 | 12 | (25) | 13 | (19) | 0 | (100) | 0 | (100) | 19 | 0 | 0 | (100) |
| 219 | 87 | (27) | 87 | (23) | 113 | 0 | 128 | 128 | 6 | 0 | 113 | 0 |
| 220 | 16 | (24) | 17 | (19) | 21 | 0 | 22 | 5 | 21 | 0 | 21 | 0 |
| 221 | 162 | (26) | 178 | (19) | 220 | 0 | 251 | 15 | 219 | 0 | 216 | (1) |
| 222 | 7 | (30) | 7 | (30) | 0 | (100) | 0 | (100) | 10 | 0 | 11 | 10 |
| 223 | (27) | 94 | (27) | (23) | 129 | 0 | 136 | 129 | 0 | 5 | 129 | 0 |
| 224 | 70 | (27) | 74 | (23) | 0 | (100) | 0 | (100) | 96 | 0 | 92 | (14) |
| 225 | 111 | (27) | 117 | (23) | 152 | 0 | 161 | 6 | 152 | 0 | 145 | (15) |

| Alignment Number | Alignment Name | Proj. AUM | Pres. Over AUM | Alternative A | | | | Alternative B | | | | Change | 5-Year Forest Level AUM | Change | 30-Year Forest Level AUM | Change | T | |
|------------------|-----------------------|-----------|----------------|-------------------------|--------|--------------------------|--------|-------------------------|--------|--------------------------|--------|--------|-------------------------|--------|--------------------------|--------|----|---|
| | | | | 5-Year Forest Level AUM | Change | 30-Year Forest Level AUM | Change | 5-Year Forest Level AUM | Change | 30-Year Forest Level AUM | Change | | | | | | | |
| 227 | Wells Ind. | 16 | 16 | 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 | 0 | 16 | 0 | 16 | 0 | 0 | |
| 228 | Spencer-Hill | 175 | 175 | 175 | 0 | 175 | 0 | 175 | 0 | 175 | 0 | 0 | 175 | 0 | 175 | 0 | 0 | |
| 229 | Stout | 18 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 18 | 0 | 18 | 0 | 0 | |
| 230 | Tarner | 163 | 163 | 163 | 0 | 163 | 0 | 163 | 0 | 163 | 0 | 0 | 163 | 0 | 163 | 0 | 0 | |
| 231 | Stehleberg | 119 | 119 | 119 | 0 | 119 | 0 | 119 | 0 | 119 | 0 | 0 | 119 | 0 | 119 | 0 | 0 | |
| 232 | Schweizer Ind. | 140 | 140 | 140 | 0 | 140 | 0 | 140 | 0 | 140 | 0 | 0 | 140 | 0 | 140 | 0 | 0 | |
| 233 | Hopper Creek | 215 | 215 | 215 | 0 | 215 | 0 | 215 | 0 | 215 | 0 | 0 | 215 | 0 | 215 | 0 | 0 | |
| 234 | Mrs. Seid Ind. | 74 | 74 | 74 | 0 | 74 | 0 | 74 | 0 | 74 | 0 | 0 | 74 | 0 | 74 | 0 | 0 | |
| 235 | Frye | 226 | 226 | 227 | 1 | 227 | 1 | 227 | 1 | 227 | 1 | 0 | 227 | 1 | 227 | 1 | 0 | |
| 236 | Middle Fork | 89 | 89 | 89 | 0 | 89 | 0 | 89 | 0 | 89 | 0 | 0 | 89 | 0 | 89 | 0 | 0 | |
| 237 | Black Canyon (Show) | 1,972 | 1,972 | 1,973 | 1 | 1,973 | 1 | 1,973 | 1 | 2,042 | 70 | 0 | 2,042 | 70 | 2,042 | 70 | 0 | |
| 238 | Staplet-Lattie Co. | 87 | 87 | 88 | 1 | 88 | 1 | 88 | 1 | 100 | 12 | 0 | 100 | 12 | 100 | 12 | 0 | |
| 239 | Staplet Industries | 12 | 12 | 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 | 0 | 12 | 0 | 12 | 0 | 0 | |
| 240 | Clippert Flat | 219 | 219 | 219 | 0 | 219 | 0 | 219 | 0 | 219 | 0 | 0 | 219 | 0 | 219 | 0 | 0 | |
| 241 | Sinker Ind. | 10 | 10 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 0 | 10 | 0 | 10 | 0 | 0 | |
| 242 | Ray Silver | 32 | 32 | 32 | 0 | 32 | 0 | 32 | 0 | 32 | 0 | 0 | 32 | 0 | 32 | 0 | 0 | |
| 243 | Rocky Ridge | 110 | 110 | 109 | -1 | 109 | -1 | 109 | -1 | 109 | -1 | 0 | 109 | -1 | 109 | -1 | 0 | |
| 244 | Smith Ind. Allot. | 17 | 17 | 21 | 4 | 21 | 4 | 21 | 4 | 100 | 79 | 0 | 100 | 79 | 100 | 79 | 0 | |
| 245 | Smith-Lake Canyon | 88 | 88 | 88 | 0 | 88 | 0 | 88 | 0 | 75 | -13 | 0 | 75 | -13 | 75 | -13 | 0 | |
| 247 | Wilson Ind. | 20 | 20 | 20 | 0 | 20 | 0 | 20 | 0 | 100 | 80 | 0 | 100 | 80 | 100 | 80 | 0 | |
| 248 | Haystack Ind. | 114 | 114 | 114 | 0 | 114 | 0 | 114 | 0 | 114 | 0 | 0 | 114 | 0 | 114 | 0 | 0 | |
| 249 | Staplet Creek | 1,285 | 1,285 | 1,227 | -58 | 1,227 | -58 | 1,227 | -58 | 1,158 | -127 | 0 | 1,158 | -127 | 1,158 | -127 | 0 | |
| 250 | Squire Creek | 25 | 25 | 25 | 0 | 25 | 0 | 25 | 0 | 100 | 75 | 0 | 100 | 75 | 100 | 75 | 0 | |
| 252 | Little Creek | 44 | 44 | 40 | -4 | 40 | -4 | 40 | -4 | 40 | -4 | 0 | 40 | -4 | 40 | -4 | 0 | |
| 253 | Bate Field | 120 | 120 | 128 | 8 | 128 | 8 | 128 | 8 | 173 | 53 | 0 | 173 | 53 | 173 | 53 | 0 | |
| 254 | Sand Hollow | 1,500 | 1,500 | 1,501 | 1 | 1,501 | 1 | 1,501 | 1 | 1,290 | -210 | 0 | 1,290 | -210 | 1,290 | -210 | 0 | |
| 255 | Sutton Ind. | 10 | 10 | 10 | 0 | 10 | 0 | 10 | 0 | 100 | 90 | 0 | 100 | 90 | 100 | 90 | 0 | |
| 256 | Sutton Ranches Ind. | 16 | 16 | 16 | 0 | 16 | 0 | 16 | 0 | 100 | 84 | 0 | 100 | 84 | 100 | 84 | 0 | |
| 257 | Thompson Ind. | 5 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 100 | 95 | 0 | 100 | 95 | 100 | 95 | 0 | |
| 258 | Thompson | 56 | 56 | 55 | -1 | 55 | -1 | 55 | -1 | 55 | -1 | 0 | 55 | -1 | 55 | -1 | 0 | |
| 259 | Towell | 19 | 19 | 19 | 0 | 19 | 0 | 19 | 0 | 100 | 81 | 0 | 100 | 81 | 100 | 81 | 0 | |
| 260 | Crane Creek Ind. | 143 | 143 | 143 | 0 | 143 | 0 | 143 | 0 | 143 | 0 | 0 | 143 | 0 | 143 | 0 | 0 | |
| 261 | Two Sisters | 214 | 214 | 209 | -5 | 209 | -5 | 209 | -5 | 209 | -5 | 0 | 209 | -5 | 209 | -5 | 0 | |
| 262 | Vogel & Opie Ind. | 32 | 32 | 32 | 0 | 32 | 0 | 32 | 0 | 100 | 68 | 0 | 100 | 68 | 100 | 68 | 0 | |
| 263 | Watte Ind. | 26 | 26 | 8 | -18 | 8 | -18 | 8 | -18 | 0 | 100 | 72 | 0 | 100 | 72 | 100 | 72 | 0 |
| 264 | Walker Ind. | 10 | 10 | 8 | -2 | 8 | -2 | 8 | -2 | 100 | 92 | 0 | 100 | 92 | 100 | 92 | 0 | |
| 265 | Watson Ind. | 4 | 4 | 2 | -2 | 2 | -2 | 2 | -2 | 2 | -2 | 0 | 2 | -2 | 2 | -2 | 0 | |
| 266 | Montour Ind. | 18 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 18 | 0 | 0 | 18 | 0 | 18 | 0 | 0 | |
| 267 | Alder Creek Ind. | 163 | 163 | 163 | 0 | 163 | 0 | 163 | 0 | 163 | 0 | 0 | 163 | 0 | 163 | 0 | 0 | |
| 268 | Wester Swamp Ind. | 212 | 212 | 47 | -165 | 47 | -165 | 47 | -165 | 47 | -165 | 0 | 47 | -165 | 47 | -165 | 0 | |
| 269 | Wells Ind. | 23 | 23 | 23 | 0 | 23 | 0 | 23 | 0 | 15 | -8 | 0 | 15 | -8 | 15 | -8 | 0 | |
| 270 | Whitman Ind. | 22 | 22 | 22 | 0 | 22 | 0 | 22 | 0 | 100 | 78 | 0 | 100 | 78 | 100 | 78 | 0 | |
| 271 | Williams - Fairchild | 167 | 167 | 167 | 0 | 167 | 0 | 167 | 0 | 187 | 20 | 0 | 187 | 20 | 187 | 20 | 0 | |
| 272 | Williamson | 41 | 41 | 41 | 0 | 41 | 0 | 41 | 0 | 41 | 0 | 0 | 41 | 0 | 41 | 0 | 0 | |
| 273 | Perkins Creek | 93 | 93 | 93 | 0 | 93 | 0 | 93 | 0 | 71 | -22 | 0 | 71 | -22 | 71 | -22 | 0 | |
| 274 | Wenger Ind. | 32 | 32 | 32 | 0 | 32 | 0 | 32 | 0 | 100 | 68 | 0 | 100 | 68 | 100 | 68 | 0 | |
| 275 | Woodland Ind. | 118 | 118 | 128 | 10 | 128 | 10 | 128 | 10 | 128 | 10 | 0 | 128 | 10 | 128 | 10 | 0 | |
| 276 | Longway Ind. | 40 | 40 | 40 | 0 | 40 | 0 | 40 | 0 | 40 | 0 | 0 | 40 | 0 | 40 | 0 | 0 | |
| 278 | Spring Valley | 739 | 739 | 401 | -338 | 401 | -338 | 401 | -338 | 316 | -423 | 0 | 316 | -423 | 316 | -423 | 0 | |
| 279 | Black Canyon | 494 | 494 | 244 | -250 | 244 | -250 | 244 | -250 | 247 | -247 | 0 | 247 | -247 | 247 | -247 | 0 | |
| 280 | Lick Creek | 1,651 | 1,651 | 1,651 | 0 | 1,651 | 0 | 1,651 | 0 | 1,618 | -33 | 0 | 1,618 | -33 | 1,618 | -33 | 0 | |
| 284 | Spring Creek | 1,122 | 1,122 | 1,255 | 1,255 | 1,255 | 1,255 | 1,255 | 1,255 | 1,259 | 4 | 0 | 1,259 | 4 | 1,259 | 4 | 0 | |
| 286 | Reardon Ind. | 28 | 28 | 28 | 0 | 28 | 0 | 28 | 0 | 100 | 72 | 0 | 100 | 72 | 100 | 72 | 0 | |
| 287 | Stippich Pasture | 40 | 40 | 40 | 0 | 40 | 0 | 40 | 0 | 40 | 0 | 0 | 40 | 0 | 40 | 0 | 0 | |
| 288 | Double Diamond | 16 | 16 | 13 | -3 | 13 | -3 | 13 | -3 | 100 | 84 | 0 | 100 | 84 | 100 | 84 | 0 | |
| 289 | Porter Creek | 15 | 15 | 15 | 0 | 15 | 0 | 15 | 0 | 9 | -6 | 0 | 9 | -6 | 9 | -6 | 0 | |
| 290 | Hornet Creek | 41 | 41 | 40 | -1 | 40 | -1 | 40 | -1 | 40 | -1 | 0 | 40 | -1 | 40 | -1 | 0 | |
| 291 | Hornet Creek | 6 | 6 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | |
| 292 | D. Morris Ind. | 24 | 24 | 24 | 0 | 24 | 0 | 24 | 0 | 100 | 76 | 0 | 100 | 76 | 100 | 76 | 0 | |
| 293 | North Fork FR | 90 | 90 | 36 | -54 | 36 | -54 | 36 | -54 | 26 | -64 | 0 | 26 | -64 | 26 | -64 | 0 | |
| 294 | U-Bar-M FR | 91 | 91 | 95 | 4 | 95 | 4 | 95 | 4 | 83 | -8 | 0 | 83 | -8 | 83 | -8 | 0 | |
| 295 | Little Wolf | 244 | 244 | 244 | 0 | 244 | 0 | 244 | 0 | 242 | -2 | 0 | 242 | -2 | 242 | -2 | 0 | |
| 297 | Wet Butch | 6 | 6 | 6 | 0 | 6 | 0 | 6 | 0 | 100 | 94 | 0 | 100 | 94 | 100 | 94 | 0 | |
| 298 | Wet | 143 | 143 | 124 | -19 | 124 | -19 | 124 | -19 | 124 | -19 | 0 | 124 | -19 | 124 | -19 | 0 | |
| 299 | Cox FR | 18 | 18 | 18 | 0 | 18 | 0 | 18 | 0 | 100 | 82 | 0 | 100 | 82 | 100 | 82 | 0 | |
| 300 | WFR Ind. | 4 | 4 | 4 | 0 | 4 | 0 | 4 | 0 | 100 | 96 | 0 | 100 | 96 | 100 | 96 | 0 | |
| 301 | Holland Butch | 553 | 553 | 495 | -58 | 495 | -58 | 495 | -58 | 525 | 72 | 0 | 525 | 72 | 525 | 72 | 0 | |
| 302 | Wester Creek | 56 | 56 | 56 | 0 | 56 | 0 | 56 | 0 | 56 | 0 | 0 | 56 | 0 | 56 | 0 | 0 | |
| 303 | Shaw FR | 6 | 6 | 11 | 5 | 11 | 5 | 11 | 5 | 100 | 94 | 0 | 100 | 94 | 100 | 94 | 0 | |
| 304 | Center Allot. | 620 | 620 | 742 | 122 | 742 | 122 | 742 | 122 | 602 | -18 | 0 | 602 | -18 | 602 | -18 | 0 | |
| 306 | Big Creek | 80 | 80 | 80 | 0 | 80 | 0 | 80 | 0 | 80 | 0 | 0 | 80 | 0 | 80 | 0 | 0 | |
| 307 | Dry Lake | 0 | 0 | 210 | 210 | 210 | 210 | 210 | 210 | 17 | -193 | 0 | 17 | -193 | 17 | -193 | 0 | |
| 308 | Bay Ranch | 20 | 20 | 20 | 0 | 20 | 0 | 20 | 0 | 20 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | |
| 309 | House Front | 438 | 438 | 361 | -77 | 361 | -77 | 361 | -77 | 361 | -77 | 0 | 361 | -77 | 361 | -77 | 0 | |
| 310 | Black Canyon | 2,629 | 2,629 | 2,539 | -90 | 2,539 | -90 | 2,539 | -90 | 2,120 | -509 | 0 | 2,120 | -509 | 2,120 | -509 | 0 | |
| 311 | No Unit | 1,478 | 1,478 | 949 | -529 | 949 | -529 | 949 | -529 | 944 | -5 | 0 | 944 | -5 | 944 | -5 | 0 | |
| 312 | Bannister Basin | 266 | 266 | 264 | -2 | 264 | -2 | 264 | -2 | 264 | -2 | 0 | 264 | -2 | 264 | -2 | 0 | |
| 313 | Fennick Place | 17 | 17 | 17 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 0 | 17 | 0 | 17 | 0 | 0 | |
| 314 | Bingman | 14 | 14 | 14 | 0 | 14 | 0 | 14 | 0 | 100 | 86 | 0 | 100 | 86 | 100 | 86 | 0 | |
| 315 | Ferteling | 5 | 5 | 5 | 0 | 5 | 0 | 5 | 0 | 100 | 95 | 0 | 100 | 95 | 100 | 95 | 0 | |
| 320 | Lucky Peak | 26 | 26 | 26 | 0 | 26 | 0 | 26 | 0 | 100 | 74 | 0 | 100 | 74 | 100 | 74 | 0 | |
| 322 | Stephens Ind. | 44 | 44 | 44 | 0 | 44 | 0 | 44 | 0 | 44 | 0 | 0 | 44 | 0 | 44 | 0 | 0 | |
| 325 | Robert Roushon Ind. | 26 | 26 | 26 | 0 | 26 | 0 | 26 | 0 | 13 | -13 | 0 | 13 | -13 | 13 | -13 | 0 | |
| 326 | Roberts Ind. | 8 | 8 | 8 | 0 | 8 | 0 | 8 | 0 | 100 | 92 | 0 | 100 | 92 | 100 | 92 | 0 | |
| 341 | Crane Creek Allot. | 974 | 974 | 974 | 0 | 974 | 0 | 974 | 0 | 1,105 | 131 | 0 | 1,105 | 131 | 1,105 | 131 | 0 | |
| 342 | Footfalls | 1,035 | 1,035 | 1,035 | 0 | 1,035 | 0 | 1,035 | 0 | 1,037 | 2 | 0 | 1,037 | 2 | 1,037 | 2 | 0 | |
| 343 | Brace Allot. | 48 | 48 | 48 | 0 | 48 | 0 | 48 | 0 | 48 | 0 | 0 | 48 | 0 | 48 | 0 | 0 | |
| 344 | Whiskey Rapids Allot. | 57 | 57 | 54 | -3 | 54 | -3 | 54 | -3 | 54 | -3 | 0 | 54 | -3 | 54 | -3 | 0 | |
| 345 | Big Creek Allot. | 49 | 49 | 42 | -7 | 42 | -7 | 42 | -7 | 100 | 51 | 0 | 100 | 51 | 100 | 51 | 0 | |
| 346 | Staley Allot. | 36 | 36 | 36 | 0 | 36 | 0 | 36 | 0 | 36 | 0 | 0 | 36 | 0 | 36 | 0 | 0 | |
| 347 | Manney Snyder FR | 97 | 97 | | | | | | | | | | | | | | | |

| Aliment Number | ALTERNATIVE C | | | | ALTERNATIVE D | | | | ALTERNATIVE E | | | |
|-------------------|------------------------|-----------------------------------|-------------------------|-----------------------------------|------------------------|-----------------------------------|-------------------------|-----------------------------------|------------------------|-----------------------------------|-------------------------|-----------------------------------|
| | 5-year forage level | Change 10-year forage level | 20-year forage level | Change 10-year forage level | 5-year forage level | Change 10-year forage level | 20-year forage level | Change 10-year forage level | 5-year forage level | Change 10-year forage level | 20-year forage level | Change 10-year forage level |
| | ALM's | (Decrease) | ALM's | (Decrease) | ALM's | (Decrease) | ALM's | (Decrease) | ALM's | (Decrease) | ALM's | (Decrease) |
| 112 | 805 | 0 | 12 | 151 | 76 | 0 | 17 | 6 | 76 | 0 | 14 | 0 |
| 228 | 128 | 127 | 124 | 123 | 175 | 0 | 185 | 6 | 175 | 0 | 149 | 13 |
| 229 | 13 | 128 | 14 | 122 | 14 | 111 | 17 | 6 | 19 | 0 | 14 | 122 |
| 230 | 124 | 124 | 145 | 131 | 174 | 1 | 217 | 32 | 167 | 0 | 190 | 17 |
| 231 | 79 | 121 | 87 | 123 | 74 | 121 | 74 | 106 | 121 | 0 | 150 | 150 |
| 232 | 127 | 19 | 210 | 50 | 184 | 33 | 246 | 181 | 141 | 0 | 248 | 77 |
| 233 | 157 | 157 | 165 | 123 | 215 | 0 | 227 | 6 | 215 | 0 | 198 | 181 |
| 234 | 56 | 123 | 52 | 128 | 74 | 0 | 79 | 5 | 74 | 0 | 79 | 5 |
| 235 | 146 | 123 | 174 | 123 | 227 | 0 | 247 | 6 | 227 | 0 | 218 | 41 |
| 236 | 29 | 154 | 41 | 154 | 89 | 0 | 94 | 6 | 89 | 0 | 86 | 13 |
| 237 | 1,524 | 1,524 | 1,476 | 1,461 | 2,141 | 12 | 2,679 | 44 | 1,977 | 0 | 2,454 | 24 |
| 238 | 50 | 124 | 55 | 122 | 0 | 100 | 0 | 46 | 0 | 46 | 0 | 0 |
| 239 | 0 | 100 | 0 | 100 | 12 | 0 | 17 | 9 | 12 | 0 | 12 | 0 |
| 240 | 160 | 127 | 168 | 123 | 28 | 187 | 30 | 181 | 219 | 0 | 21 | 0 |
| 241 | 7 | 150 | 7 | 150 | 0 | 10 | 0 | 11 | 10 | 0 | 10 | 0 |
| 242 | 24 | 125 | 25 | 122 | 9 | 100 | 0 | 10 | 10 | 0 | 9 | 100 |
| 243 | 80 | 127 | 84 | 123 | 109 | 0 | 115 | 6 | 109 | 0 | 109 | 0 |
| 244 | 15 | 129 | 16 | 124 | 1 | 100 | 0 | 100 | 21 | 0 | 21 | 0 |
| 246 | 71 | 117 | 69 | 115 | 80 | 171 | 141 | 86 | 76 | 0 | 107 | 26 |
| 247 | 16 | 120 | 17 | 115 | 0 | 100 | 0 | 10 | 10 | 0 | 20 | 0 |
| 248 | 67 | 145 | 68 | 142 | 114 | 0 | 114 | 9 | 114 | 0 | 114 | 0 |
| 249 | 815 | 141 | 856 | 133 | 1,108 | 110 | 1,213 | 151 | 1,227 | 0 | 1,144 | 17 |
| 250 | 18 | 128 | 19 | 124 | 0 | 100 | 0 | 6 | 100 | 0 | 20 | 0 |
| 252 | 29 | 128 | 31 | 123 | 42 | 0 | 42 | 5 | 40 | 0 | 40 | 0 |
| 253 | 101 | 121 | 126 | 121 | 118 | 0 | 180 | 48 | 128 | 0 | 157 | 20 |
| 254 | 1,161 | 1,161 | 1,178 | 1,178 | 1,295 | 1,148 | 1,415 | 261 | 1,251 | 0 | 1,591 | 8 |
| 255 | 7 | 150 | 7 | 150 | 0 | 100 | 0 | 9 | 100 | 0 | 9 | 100 |
| 256 | 4 | 175 | 4 | 175 | 0 | 100 | 0 | 10 | 100 | 0 | 16 | 0 |
| 257 | 260 | 4 | 260 | 4 | 260 | 5 | 5 | 5 | 5 | 0 | 5 | 100 |
| 258 | 40 | 127 | 42 | 124 | 90 | 0 | 58 | 5 | 55 | 0 | 55 | 0 |
| 259 | 14 | 126 | 15 | 121 | 0 | 100 | 0 | 10 | 100 | 0 | 19 | 0 |
| 260 | 104 | 127 | 109 | 124 | 145 | 0 | 151 | 6 | 147 | 0 | 152 | 6 |
| 261 | 224 | 127 | 237 | 127 | 369 | 0 | 327 | 6 | 329 | 0 | 319 | 1 |
| 262 | 24 | 125 | 25 | 122 | 0 | 100 | 0 | 10 | 100 | 0 | 32 | 0 |
| 263 | 6 | 125 | 6 | 125 | 0 | 100 | 0 | 10 | 100 | 0 | 8 | 0 |
| 264 | 6 | 125 | 6 | 125 | 8 | 0 | 9 | 11 | 8 | 0 | 8 | 0 |
| 265 | 2 | 6 | 2 | 6 | 2 | 0 | 2 | 2 | 2 | 0 | 2 | 0 |
| 266 | 12 | 125 | 13 | 119 | 16 | 0 | 17 | 6 | 16 | 0 | 16 | 0 |
| 267 | 119 | 127 | 125 | 123 | 167 | 0 | 172 | 6 | 163 | 0 | 167 | 0 |
| 268 | 34 | 128 | 36 | 124 | 44 | 168 | 47 | 6 | 47 | 0 | 23 | 121 |
| 269 | 0 | 100 | 0 | 100 | 15 | 125 | 16 | 100 | 23 | 0 | 16 | 100 |
| 270 | 16 | 129 | 17 | 123 | 0 | 100 | 0 | 10 | 100 | 0 | 21 | 15 |
| 271 | 142 | 112 | 215 | 12 | 207 | 27 | 269 | 126 | 167 | 0 | 234 | 56 |
| 272 | 20 | 129 | 22 | 121 | 41 | 0 | 41 | 5 | 41 | 0 | 41 | 0 |
| 273 | 68 | 127 | 71 | 124 | 71 | 124 | 75 | 19 | 75 | 0 | 93 | 0 |
| 274 | 23 | 128 | 24 | 125 | 0 | 100 | 0 | 10 | 100 | 0 | 22 | 0 |
| 275 | 94 | 127 | 99 | 127 | 128 | 0 | 126 | 16 | 119 | 0 | 122 | 14 |
| 276 | 0 | 100 | 0 | 100 | 40 | 0 | 42 | 5 | 40 | 0 | 40 | 0 |
| 278 | 272 | 142 | 244 | 129 | 351 | 112 | 372 | 171 | 361 | 0 | 325 | 16 |
| 279 | 278 | 141 | 447 | 30 | 447 | 30 | 777 | 126 | 749 | 0 | 754 | 14 |
| 280 | 1,172 | 1,172 | 1,232 | 1,232 | 1,418 | 1,172 | 1,715 | 4 | 1,455 | 0 | 1,771 | 0 |
| 284 | 992 | 1,149 | 1,149 | 1,151 | 1,261 | 0 | 1,458 | 8 | 1,255 | 0 | 1,414 | 5 |
| 286 | 21 | 125 | 22 | 121 | 0 | 100 | 0 | 10 | 100 | 0 | 28 | 0 |
| 287 | 28 | 126 | 31 | 123 | 40 | 0 | 42 | 6 | 40 | 0 | 40 | 0 |
| 288 | 9 | 131 | 9 | 131 | 0 | 100 | 0 | 10 | 100 | 0 | 13 | 100 |
| 289 | 11 | 127 | 12 | 120 | 9 | 140 | 10 | 121 | 15 | 0 | 15 | 0 |
| 290 | 260 | 126 | 260 | 125 | 40 | 0 | 42 | 5 | 40 | 0 | 40 | 0 |
| 291 | 17 | 117 | 5 | 117 | 0 | 100 | 0 | 6 | 100 | 0 | 6 | 0 |
| 292 | 18 | 125 | 19 | 121 | 0 | 100 | 0 | 10 | 100 | 0 | 24 | 0 |
| 293 | 26 | 128 | 27 | 125 | 26 | 0 | 38 | 6 | 36 | 0 | 33 | 18 |
| 294 | 69 | 127 | 72 | 124 | 88 | 17 | 92 | 21 | 95 | 0 | 92 | 14 |
| 295 | 180 | 127 | 189 | 125 | 247 | 11 | 257 | 14 | 246 | 0 | 257 | 4 |
| 297 | 78 | 76 | 77 | 127 | 0 | 100 | 0 | 10 | 100 | 0 | 9 | 100 |
| 298 | 98 | 127 | 103 | 123 | 114 | 0 | 142 | 6 | 134 | 0 | 142 | 6 |
| 299 | 11 | 128 | 12 | 121 | 0 | 100 | 0 | 10 | 100 | 0 | 18 | 0 |
| 300 | 3 | 125 | 3 | 125 | 0 | 100 | 0 | 10 | 100 | 0 | 4 | 0 |
| 301 | 384 | 123 | 467 | 61 | 579 | 9 | 714 | 44 | 695 | 0 | 616 | 24 |
| 302 | 42 | 125 | 43 | 123 | 56 | 0 | 59 | 5 | 56 | 0 | 56 | 0 |
| 303 | 8 | 127 | 8 | 127 | 0 | 100 | 0 | 11 | 100 | 0 | 8 | 100 |
| 304 | 552 | 124 | 609 | 118 | 706 | 15 | 812 | 10 | 762 | 0 | 870 | 12 |
| 306 | 0 | 100 | 0 | 100 | 80 | 0 | 85 | 5 | 80 | 0 | 80 | 0 |
| 307 | 78 | 163 | 121 | 138 | 165 | 150 | 254 | 21 | 161 | 0 | 113 | 146 |
| 308 | 15 | 125 | 16 | 120 | 20 | 0 | 21 | 5 | 20 | 0 | 20 | 0 |
| 309 | 244 | 127 | 277 | 127 | 361 | 0 | 382 | 6 | 360 | 0 | 279 | 121 |
| 310 | 1,914 | 1,914 | 2,115 | 1,915 | 2,482 | 6 | 2,622 | 39 | 2,508 | 0 | 2,115 | 22 |
| 311 | 488 | 180 | 722 | 444 | 944 | 11 | 999 | 94 | 944 | 0 | 1,000 | 5 |
| 312 | 193 | 127 | 202 | 123 | 244 | 0 | 279 | 6 | 244 | 0 | 245 | 0 |
| 313 | 10 | 123 | 10 | 123 | 12 | 0 | 14 | 8 | 13 | 0 | 13 | 0 |
| 314 | 10 | 126 | 10 | 126 | 0 | 100 | 0 | 10 | 100 | 0 | 14 | 0 |
| 315 | 4 | 120 | 4 | 120 | 5 | 0 | 5 | 5 | 5 | 0 | 5 | 0 |
| 350 | 0 | 100 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | ERR |
| 352 | 32 | 127 | 34 | 123 | 44 | 0 | 47 | 7 | 44 | 0 | 44 | 0 |
| 353 | 19 | 127 | 20 | 121 | 155 | 17 | 150 | 14 | 26 | 124 | 23 | 119 |
| 354 | 5 | 0 | 5 | 0 | 0 | 100 | 0 | 10 | 100 | 0 | 3 | 100 |
| 361 | 815 | 171 | 1,154 | 118 | 1,171 | 20 | 1,412 | 96 | 1,171 | 0 | 1,404 | 44 |
| 362 | 127 | 755 | 798 | 123 | 1,038 | 0 | 1,111 | 7 | 1,074 | 0 | 1,145 | 1 |
| 363 | 35 | 127 | 37 | 123 | 48 | 0 | 51 | 6 | 48 | 0 | 49 | 143 |
| 364 | 39 | 124 | 41 | 124 | 54 | 0 | 57 | 6 | 54 | 0 | 51 | 16 |
| 365 | 34 | 119 | 46 | 10 | 49 | 17 | 75 | 79 | 42 | 0 | 57 | 36 |
| 366 | 24 | 128 | 27 | 125 | 36 | 0 | 38 | 6 | 36 | 0 | 36 | 0 |
| 367 | 61 | 127 | 64 | 123 | 64 | 123 | 68 | 181 | 87 | 0 | 64 | 123 |
| 368 | 421 | 127 | 442 | 123 | 521 | 18 | 562 | 21 | 526 | 0 | 569 | 13 |
| 369 | 706 | 127 | 742 | 123 | 939 | 0 | 1,027 | 6 | 970 | 0 | 954 | 121 |
| 370 | 1,245 | 1,245 | 1,276 | 1,276 | 1,474 | 0 | 1,927 | 15 | 1,474 | 0 | 1,779 | 6 |
| 371 | 35 | 127 | 37 | 123 | 0 | 100 | 0 | 10 | 100 | 0 | 48 | 0 |
| 372 | 3 | 125 | 3 | 125 | 0 | 100 | 0 | 10 | 100 | 0 | 4 | 0 |
| 373 | 0 | 100 | 0 | 100 | 0 | 37 | 0 | 29 | 37 | 0 | 37 | 0 |
| 374 | 9 | 125 | 9 | 125 | 12 | 0 | 13 | 8 | 12 | 0 | 12 | 0 |
| 375 | 9 | 125 | 9 | 125 | 12 | 0 | 13 | 8 | 12 | 0 | 12 | 0 |
| 376 | 16 | 127 | 17 | 123 | 22 | 0 | 24 | 9 | 22 | 0 | 22 | 0 |
| 377 | 10 | 127 | 10 | 123 | 76 | 0 | 102 | 10 | 96 | 0 | 88 | 48 |
| 378 | 187 | 127 | 196 | 123 | 250 | 12 | 265 | 4 | 256 | 0 | 265 | 4 |
| 379 | 37 | 127 | 39 | 124 | 0 | 100 | 0 | 10 | 100 | 0 | 51 | 25 |
| 380 | 184 | 127 | 189 | 124 | 145 | 0 | 151 | 15 | 147 | 0 | 112 | 17 |
| 381 | 20 | 124 | 21 | 121 | 27 | 0 | 29 | 7 | 27 | 0 | 27 | 0 |
| 382 | 172 | 126 | 190 | 118 | 238 | 3 | 275 | 19 | 231 | 0 | 249 | 8 |
| 383 | 0 | 137 | 5 | 137 | 0 | 100 | 0 | 10 | 100 | 0 | 0 | 100 |
| 384 | 140 | 127 | 147 | 123 | 145 | 124 | 154 | 120 | 142 | 0 | 131 | 17 |
| 385 | 4 | 120 | 4 | 120 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 |
| 386 | 49 | 127 | 51 | 124 | 67 | 0 | 71 | 6 | 67 | 0 | 67 | 0 |
| 387 | 7 | 130 | 7 | 130 | 5 | 150 | 5 | 150 | 16 | 0 | 5 | 150 |
| 388 | 18 | 128 | 19 | 124 | 10 | 160 | 11 | 158 | 25 | 0 | 28 | 44 |

| Allotment Number | Allotment Name | Pref. Active AUM's | Pref. Total AUM's | Average License Use AUM's | ALTERNATIVE A | | | | ALTERNATIVE B | | | |
|---------------------|----------------------|--------------------------|-------------------------|---------------------------------|---------------------------------|-----------------------------|----------------------------------|-----------------------------|---------------------------------|-----------------------------|----------------------------------|-----------------------------|
| | | | | | 5-Year Forage Level AUM's | T Change () decrease | 20 Year Forage Level AUM's | T Change () decrease | 5-Year Forage Level AUM's | T Change () decrease | 20 Year Forage Level AUM's | T Change () decrease |
| 389 | Long Hollow Field | 142 | 142 | 142 | 142 | 0 | 142 | 0 | 142 | 0 | 149 | 4 |
| 390 | Fenced Federal Range | 114 | 114 | 114 | 114 | 0 | 114 | 0 | 109 | 15 | 112 | 11 |
| 391 | Little Sweett Allot. | 4,255 | 4,255 | 3,570 | 3,564 | 0 | 3,964 | 0 | 4,247 | 4 | 5,064 | 47 |
| 392 | Fenced Federal Range | 58 | 58 | 58 | 58 | 0 | 58 | 0 | 58 | 0 | 57 | 5 |
| 393 | Indian Lake | 3,202 | 3,202 | 3,262 | 3,262 | 0 | 3,262 | 0 | 3,245 | 4 | 4,027 | 38 |
| 396 | Sixers Purchase | 34 | 34 | 34 | 34 | 0 | 34 | 0 | 27 | 121 | 29 | 188 |
| 1,278 | Quartzberg | 210 | 210 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 388 | Fenced Federal Range | 124 | 124 | 124 | 124 | 0 | 124 | 0 | 124 | 0 | 129 | 4 |
| | | Pref. Active | Pref. Total | Average License Use | | | | | | | | |
| TOTALS | | | | | 66,014 | 0 | 66,014 | 0 | 61,872 | 171 | 71,076 | 7 |

APPENDIX G

LIVESTOCK USE LEVELS METHODOLOGY

Alternative A

The 5-year livestock forage use levels are based on the present 5-year average license use minus forage lost to land transfers, exchanges, desert land entries, special designation, historic and cultural areas.

The 20-year livestock forage use levels are identical to the 5-year forage use levels.

Alternative B

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Adding one-quarter ($1/4$) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Adding forage gained on 18% of the remaining native range, ie., total acres minus custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 18% of the remaining native range).
3. Adding all of the 20-year projected forage gained from seedings.

Alternative C

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Subtracting forage lost to wildlife, watershed, and range condition improvement (27% reduction) from the 5-year average license use;
3. Adding one-quarter ($1/4$) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Subtracting forage lost to wildlife, watershed, and range condition improvement (27% reduction) from the 5-year average license use;
3. Adding forage gained on 20% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 20% of the remaining native range; 10% due to management, 10% due to wildlife reductions).
4. Adding all of the 20-year projected forage gained from seedings.

Alternative D

The 5-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Adding one-quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Adding forage gained on 25% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 25% of the remaining native range).
3. Adding all of the 20-year projected forage gained from seedings.

Alternative E

The initial livestock forage use levels were determined by subtracting forage lost to existing land transfer applications currently being processed from the 5-year average license use.

The 5-year livestock forage use levels were determined by starting with the 5-year average license use subtracting forage lost to existing land transfer applications currently being processed, and adding approximately one quarter (1/4) of the 20-year projected forage levels gained from seedings.

Twenty-year livestock forage use levels were determined by:

1. Subtracting forage lost to land transfers, exchanges, DLEs, special designation, historic, and cultural areas from the 5-year average license use;
2. Subtracting forage lost to wildlife big game winter and summer range from the 5-year average license use;
3. Adding forage gained on 25% of the remaining native range, ie., total acres minus acres of custodial range, excellent condition range, good condition range, and seedings (in other words projecting an improvement of range condition due to increased management, fencing, and water development on 25% of the remaining native range).
4. Adding all of the 20-year projected forage gained from seedings.

APPENDIX H

AQUATIC/RIPARIAN HABITAT IMPROVEMENT PROJECTS

| Stream | Location | | | Proposed Alternatives | Existing Habitat Condition (miles) | Habitat Condition End of 20 | Years | Project Treatment |
|-------------------|----------|-------|--------------------|-----------------------|------------------------------------|-----------------------------|-------|---|
| | Township | Range | Allotment | | | | | |
| Harris Creek | 6 N. | 2 E. | 278 | A,B,C,D,E | 0.4 mi Fair | Good | | Rip-rap road erosion, stream-bank planting |
| Shafer Creek | 6 N. | 2 E. | 278,045,070 | A,B,C,D,E | 1.5 mi Fair | Good | | Rip-rap road erosion, stream-bank planting, fence |
| Big Willow Creek | 9 N. | 1 W. | 005,393,009 | A,B,C,D,E | 3.1 mi Fair | Good | | Fence, rip-rap, streambank plantings, instream structure |
| Little Weiser R. | 14 N. | 1 E. | 041 | C,E | 0.7 mi Fair | Good | | Rip-rap road erosion, stream-bank plantings |
| Manns Creek | 13 N. | 5 W. | 208 | A,C,D,E | 1.6 mi Good | Good | | Rip-rap eroding areas, stream-bank plantings |
| Dennett Creek | 14 N. | 6 W. | 377,378,380 | A,B,C,D,E | 3.4 mi Poor | Good | | Fence, rip-rap eroding areas, streambank plantings, instream structures |
| Rock Creek | 13 N. | 6 W. | 368,207,214 032 | A,B,C,D,E | 3.1 mi Poor | Good | | Fence, streambank planting |
| N. Fk. Payette R. | 17 N. | 3 E. | | A,B,C,D | 3.0 mi Fair | Fair | | Streambank planting |
| Deer Creek | 9 N. | 4 E. | 003 | C | 1.1 mi Fair | Fair | | Fence small meadows |
| Lt. Pine Creek | 16 N. | 4 W. | 156 | A,C | 0.7 mi Fair | Good | | Fence/streambank plantings |
| Grouse Creek | 12 N. | 7 W. | 194 | A,D | 0.9 mi Fair | Good | | Fence |

APPENDIX I

RIPARIAN HABITAT CONDITION

| Creek | Length | Existing Habitat Condition | Location | | Alternatives | | | | | | Comments |
|----------------------|----------|----------------------------------|-------------|--------------------|--------------|----|----|----|----|---|----------|
| | | | Allotment | Town- shipRange | A | B | C | D | E | | |
| Cold Springs Cr. | 0.3 mi | Excellent | 276 | 18 N. 1 W. | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives | |
| Lt. Johnson Cr. | *1.1 mi | Good | 016 | 16 N. 2 W. | G | G | G | G | G | Maintain in all alternatives | |
| | 0.3 mi | Good | 161 | | G | G | G | G | G | Maintain in all alternatives | |
| Goodrich Cr. | *0.8 mi | Excellent | 016 | 16 N. 2 W. | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives | |
| Spring Cr. (West) | *1.6 mi | Fair | 095 | 15 N. 3 W. | F | F | G | F | F | To good in C due to livestock reduction | |
| | *1.1 mi | Good | 095 | | G | G | G | G | G | Maintain in all alternatives | |
| Camp Cr. | 0.3 mi | Good | 033 | 15 N. 3 W. | G | G | G | G | G | Maintain in all alternatives | |
| | *0.9 mi | Good | 095 | | G | F | G | F | F | To fair in B,D,E due to livestock increases | |
| Deep Cr. (North) | *1.6 mi | Poor | 056 | 14 N. 4 W. | P | P | P | P | P | Maintain in all alternatives | |
| Hopper Cr. | *1.4 mi | Good | 233 | 14 N. 4 W. | G | F | G | F | G | To fair in B,D due to livestock increases | |
| Keithly Cr. | *1.6 mi | Good | 233 | 14 N. 4 W. | G | G | G | G | G | Maintain in all alternatives | |
| Keithly Cr. Trib. | *1.1 mi | Good | 233 | 14 N. 4 W. | G | G | G | G | G | Maintain in all alternatives | |
| Sage Cr. | *0.3 mi | Fair | 208 | 14 N. 5 W. | F | P | G | F | F | To poor in B,D stock increases, to good in C stock reductions | |
| | *1.1 mi | Good | 208 | 14 N. 5 W. | G | G | G | G | G | Maintain in all alternatives | |
| | *1.5 mi | Excellent | 208 | 14 N. 5 W. | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives | |
| Fir Cr. | 1.2 mi | Good | SD | 13 N. 5 W. | G | G | G | G | G | Maintain in all alternatives | |
| | 1.0 mi | Good | 068 | | G | G | G | G | G | Maintain in all alternatives | |
| | 0.2 mi | Good | 027 | | G | G | G | G | G | Maintain in all alternatives | |
| Manns Cr. | *1.6 mi | Fair | 208 | 13 N. 5 W. | F | F | F | F | F | Maintain in all alternatives | |
| Trib. to "Canal Cr." | *1.8 mi | Fair | 208 | 14 N. 5 W. | F | F | F | F | F | Maintain in all alternatives | |
| Indian Cr. (North) | 0.7 mi | Good | 280 | 19 N. 4 W. | G | G | G | G | G | To fair in D due to livestock increases | |
| | 0.4 mi | Excellent | 280 | | Ex | Ex | Ex | G | Ex | To good in D due to livestock increases | |
| Summer Cr. | 1.2 mi | Good | 280 | 18 N. 4 W. | G | G | G | F | G | To fair in D due to livestock increases | |
| Trib. to Summer Cr. | 0.6 mi | Good | 280 | 18 N. 6 W. | G | G | G | F | G | To fair in D due to livestock increases | |
| Jackson Gulch | *0.2 mi | Fair | 170 | 16 N. 6 W. | F | G | G | G | G | To good in B,C,D,E due to livestock reductions | |
| | *0.7 mi | Good | 170 | | F | Ex | Ex | Ex | Ex | To fair in A due to downward trend; to excellent in B,C,D,E due to livestock reductions | |
| Lone Pine Gulch | *0.6 mi | Fair | 249 | 16 N. 6 W. | F | F | F | F | F | Maintain in all alternatives | |
| | *0.8 mi | Good | 249 | | F | F | F | F | F | To fair in A,B,C,D,E due to livestock levels/downward trend | |
| Lick Cr. | *1.5 mi | Good | 249 | 15 N. 6 W. | F | F | F | F | F | To fair in A,B,C,D,E due to livestock levels/downward trend | |
| Trib. to Lick Cr. | *0.6 mi | Good | 249 | 15 N. 6 W. | F | F | F | F | F | To fair in A,B,C,D,E due to livestock levels/downward trend | |
| Sheep Cr. | *0.6 mi | Fair | 249 | 15-16 N. | F | F | F | F | F | Maintain in all alternative | |
| | *0.6 mi | Good | 249 | N. | F | G | G | G | G | Good to fair in A due to stocking rate/downward trend | |
| Dennett Cr. | 0.2 mi | Good | 377 | 15 N. 6 W. | G | G | G | G | G | Maintain due to fencing proposal | |
| | *0.5 mi | Fair | 380 | | G | G | G | G | G | To good in all due to fencing proposal | |
| | *1.6 mi | Good | 380 | | G | G | G | G | G | Maintain in all due to fencing proposal | |
| Golden Goose Canyon | *0.2 mi | Fair | 369 | 14 N. 6 W. | F | F | F | F | F | Maintain in all alternatives | |
| | *0.8 mi | Good | 369 | | F | F | G | F | G | To fair in A,B,D due to livestock levels/downward trend | |
| Sumac Cr. | *1.3 mi | Fair | 369 | 14 N. 6 W. | F | F | F | F | F | Maintain in all alternatives | |
| Thorn Spring Cr. | *0.4 mi | Fair | 369 | 14 N. 6 W. | F | F | F | F | F | Maintain in all alternatives | |
| Trib. of Wolf Cr. | *1.0 mi | Good | 142 | 13 N. 6 W. | G | G | G | G | G | Maintain in all alternatives | |
| Rock Cr. | *0.4 mi | Fair | 207 | 13 N. 6 W. | G | G | G | G | G | To good in all due to fencing proposal | |
| | 1.0 mi | Good | 214 | | G | G | G | G | G | Maintain due to fencing proposal | |
| | 0.3 mi | Fair | 214 | | G | G | G | G | G | To good in all due to fencing proposal | |
| Trib. to Rock Cr. | 1.1 mi | Good | 032 | 13 N. 6 W. | G | G | G | G | G | Maintain in all alternatives | |
| Indian Cr. (South) | *0.5 mi | Fair | 005 | 9 N. 2 W. | F | F | F | F | F | Maintain in all alternatives | |
| | *1.7 mi | Good | 370,005 | | G | G | G | G | G | Maintain in all alternatives | |
| | *10.7 mi | Excellent | 370 | | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives | |
| Rattlesnake Cr. | *0.8 mi | Fair | 191 | 9 N. 2 W. | F | F | F | F | F | Maintain in all alternatives | |
| | *0.5 mi | Good | 191 | | G | G | G | G | G | Maintain in all alternatives | |
| Weiser River | *0.5 mi | Poor | 066,361,202 | 11-12 | 4 W. | P | P | P | P | Maintain in all alternatives | |
| | *1.9 mi | Fair | 230,202,361 | N. | F | F | F | F | F | Maintain in all alternatives | |
| | | | 243,187 | | | | | | | | |
| | *2.4 mi | Good | 230,361,243 | | G | G | G | G | G | Maintain in all alternatives | |
| | | | 187 | | | | | | | | |
| Crane Cr. | *1.3 mi | Fair | 361,304,062 | 11-12 | 2-3 W. | F | F | F | F | Maintain in all alternatives | |
| | *2.8 mi | Good | 361,304,062 | N. | G | G | G | G | G | Maintain in all alternatives | |
| Trib. to Crane Cr. | *0.7 mi | Fair | 361 | 11 N. 3 W. | F | F | F | F | F | Maintain in all alternatives | |
| | *0.4 mi | Good | 361 | | G | G | G | G | G | Maintain in all alternatives | |

| Creek | Length | Existing Habitat Condition | Location | | | Alternatives | | | | | Comments |
|-----------------------|----------|----------------------------------|-------------|---------------|--------|--------------|-----|-----|-----|-----|--|
| | | | Allotment | Town- ship | Range | A | B | C | D | E | |
| S. Fk. Payette River | 0.8 mi | Fair | N/A | 9 N. | 3-4 E | F | F | F | F | F | Maintain in all alternatives |
| | 2.0 mi | Good | N/A | | | G | G | G | G | G | Maintain in all alternatives |
| Deer Cr. | *1.0 mi | Good | 003 | 9 N. | 4 E. | G | G | G | G | G | Maintain in all alternatives |
| Trib. to Deer Cr. | *0.9 mi | Good | 003 | 9 N. | 4 E. | G | G | G | G | G | Maintain in all alternatives |
| Cove Cr. | 0.8 mi | Fair | 301,021 | 10 N. | 3 W. | F | F | F | F | F | Maintain in all alternatives |
| | 0.7 mi | Good | 301,021 | | | G | G | G | G | G | Maintain in all alternatives |
| Little Willow Cr. | *12.3 mi | Fair | 191 | 10 N. | 2 W. | G | F | F | F | F | To good in A,D due to fencing proposal |
| | 1.2 mi | Good | 191 | | | G | G | G | G | G | Maintain in all alternatives |
| Big Willow Cr. | *0.1 mi | Fair | 393 | 9 N. | 1 W. | G | G | G | G | G | To good in A,B,C,D,E due to fencing proposal |
| | *1.1 mi | Good | 393 | | | G | G | G | G | G | Maintain in all alternatives |
| Trib. to Big Willow | *0.6 mi | Fair | 005 | 9 N. | 1 W. | F | F | F | F | F | Maintain in all alternatives |
| Four Mile Cr. | *1.6 mi | Fair | 005 | 9 N. | 1 W. | F | F | F | F | F | Maintain in all alternatives |
| Dry Cr. | *1.8 mi | Good | 005 | 9 N. | 1-2 W. | G | G | G | F | G | To fair in D due to livestock increases |
| Coonrod Gulch | *0.6 mi | Fair | 005 | 9 N. | 1 W. | F | F | F | F | F | Maintain in all alternatives |
| | *0.1 mi | Good | 005 | | | G | G | G | G | G | Maintain in all alternatives |
| Sucker Cr. | *1.1 mi | Good | 393 | 8 N. | 1 W. | G | F | F | F | G | To fair in B,D due to livestock increases |
| Squaw Cr. | *0.6 mi | Good | 391 | 8 N. | 1 E. | G | F | G | F | G | To fair in B,D due to livestock increases |
| Ibox Cr. | 0.9 mi | Excellent | N/A | 120 N. | 3 E. | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives |
| Kenally Cr. | 0.2 mi | Poor | 178 | 17 N. | 4 E. | P | P | P | P | P | Maintain in all alternatives |
| | 0.4 mi | Good | 178 | | | G | G | G | G | G | Maintain in all alternatives |
| | 0.2 mi | Excellent | 178 | | | Ex | Ex | Ex | Ex | Ex | Maintain in all alternatives |
| Rapid Cr. | 0.1 mi | Poor | 178 | 17 N. | 4 E. | P | P | P | P | P | Maintain in all alternatives |
| | 0.1 mi | Fair | 178 | | | F | F | F | F | F | Maintain in all alternatives |
| | 0.3 mi | Good | 178 | | | G | G | G | G | G | Maintain in all alternatives |
| Sloans Cr. | 1.0 mi | Good | 038 | 16 N. | 4 E. | G | G | G | G | G | Maintain in all alternatives |
| Shafer Cr. | 1.0 mi | Good | 070,045,278 | 6 N. | 2 E. | G | G | G | G | G | Maintain in all alternatives |
| Harris Cr. | 0.3 mi | Good | 278 | 6 N. | 2 E. | G | G | G | G | G | Maintain in all alternatives |
| Grizzly Cr. | 1.0 mi | Good | 041 | 13 N. | 1 E. | G | G | G | F | G | To fair in D due to livestock increases |
| Mill Cr. | 1.0 mi | Fair | 041 | 13 N. | 1 E. | F | F | F | F | F | Maintain in all alternatives |
| | *1.3 mi | Good | 261 | | | G | G | G | G | G | Maintain in all alternatives |
| Road Gulch | *1.7 mi | Good | 006 | 12 N. | 1 E. | G | F | F | F | G | To fair in B,D due to livestock increases |
| Sheep Cr. | *10.4 mi | Fair | 006 | 11 N. | 1 E. | F | F | F | F | F | Maintain in all alternatives |
| | *1.0 mi | Good | 006 | | | G | F | G | F | G | To fair in B,D due to livestock increases |
| Spring Cr. 1 | *1.0 mi | Unsuit. | 284 | 12 N. | 1 E. | Uns | Uns | Uns | Uns | Uns | Maintain in all alternatives |
| Spring Cr. 2 | *0.6 mi | Unsuit. | 284 | 12 N. | 1 W. | Uns | Uns | Uns | Uns | Uns | Maintain in all alternatives |
| Grays Cr. | *1.8 mi | Good | 043 | 14 N. | 1 E. | G | G | G | G | G | Maintain in all alternatives |
| N. Fk. Grays Cr. | 0.3 mi | Good | 293 | 15 N. | 1 E. | G | G | G | G | G | Maintain in all alternatives |
| Middle Fk. Weiser R. | 10.1 mi | Good | 236 | 15 N. | 1 E. | G | G | G | G | G | Maintain in all alternatives |
| Cottonwood Cr. | 12.2 mi | Good | 311 | 3-4 N. | 3 E. | G | G | G | G | G | Maintain in all alternatives |
| Trib to Cottonwood Cr | 0.7 mi | Fair | 311 | 4 N. | 3 E. | F | F | F | F | F | Maintain in all alternatives |
| Orchard Gulch | 1.2 mi | Good | 311 | 4 N. | 3 E. | G | G | G | G | G | Maintain in all alternatives |
| Hulls Gulch | 2.8 mi | Good | 311 | 4 N. | 3 E. | G | G | G | G | G | Maintain in all alternatives |
| Picket Pin Cr. | 10.5 mi | Fair | 311 | 3 N. | 3 E. | F | F | F | F | F | Maintain in all alternatives |
| Deer Cr. | *0.9 mi | Fair | 043 | 14 N. | 1 E. | F | F | F | F | F | Maintain in all alternatives |
| | *1.3 mi | Good | 043 | | | G | G | G | G | G | Maintain in all alternatives |
| Crumley Gulch | 12.3 mi | Good | 278 | 6 N. | 3 E. | G | G | G | G | G | Maintain in all alternatives |
| King Hill Cr. | 10.4 mi | Good | 041 | 14 N. | 1 E. | G | G | G | G | G | Maintain in all alternatives |
| Grouse Cr. | *0.8 mi | Good | 194 | 12 N. | 7 W. | G | G | G | G | G | Maintain in all alternatives |
| Adams Cr. | 10.2 mi | Fair | SD | 13 N. | 5 W. | F | F | F | F | F | Maintain in all alternatives |
| Picket Pin Cr. | *1.6 mi | Fair | 309 | 3 N. | 3 E. | G | G | G | G | G | To good in A,B,C,D,E due to revised AMP |
| Wildhorse River | 11.9 mi | Good | 280,013 | 18 N. | 4 W. | G | G | G | G | G | Maintain in all alternatives |
| Unnamed Drainages of | *4.5 mi | Fair | 225,194,195 | 11-16 | 6-7 W | F | F | F | F | F | Maintain in all alternatives |
| Brownlee Reservoir | 8.5 mi | Good | 364,368 | N. | | | | | | | |
| Unnamed Drainages | *3.5 mi | Fair | 016 | 15-16 | 2 W. | F | F | F | F | F | Maintain in all alternatives |
| | | | | N. | | | | | | | |
| Unnamed Trib. of | *1.0 mi | Fair | 233 | 14 N. | 4 W. | F | F | F | F | F | Maintain in all alternatives |
| Hopper Cr. | *12.3 mi | Good | 233 | | | G | G | G | G | G | Maintain in all alternatives |
| Polk Cr. | *1.0 mi | Good | 393 | 8 N. | 1 W. | G | F | G | F | G | To fair in B,D due to livestock increases |

* Portions of these streams are in allotments with proposed new or revised AMPs. Improvement will occur though it may not be to the next higher condition class.

Unsuit. - Unsuitable Rating

SD - Stock Driveway

AQUATIC/FISHERIES HABITAT CONDITION

J-1

APPENDIX K

VISUAL RESOURCE MANAGEMENT

The Visual Resource Management (or VRM) system provides Bureau managers with a means for determining visual resource values so that visual resources can be considered in the planning and design of management activities. The inventory consists of a scenic quality evaluation, sensitivity level analysis, and a determination of distance zones. Based upon these three factors, each area of land is then classified into one of four visual resource classes. Each class has an objective for maintaining visual resources, with allowances for visual change in the existing landscape. The various classes are then submitted, as inventoried, for consideration in developing Resource Management Plans (RMP). Following management review, adjustments to the visual classes are made if necessary and the approved class objectives become part of the Resource Management Plan.

The objective of Class I is to preserve the existing character of the landscape. Only congressionally authorized wilderness areas, wild rivers, and designated natural areas will be recommended for Class I. The level of change to existing visual resources conditions will probably be extremely low because only very limited development (e.g., hiking trails) will occur in these areas. This class is primarily intended to accommodate the needs of programs such as wilderness management and botanical or scientific studies.

The objective of Class II is to retain the existing character of the landscape. The change to existing visual resource conditions can be low. Management activities can be seen but should not be noticeable to the casual observer. Changes must repeat the basic elements of form, line, color and texture found in the predominant features of the characteristics landscape.

The objective of Class III is to partially retain the existing character of the landscape. The change to existing visual resource conditions can be moderate. Management activities can attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant features of the characteristic landscape.

The objective of Class IV is to plan for major modification of the existing character of the landscape. The change to existing visual resource conditions can be high. Management activities can dominate the view and be the major focus of viewer attention. Repetition of the basic elements is not necessary, but should be done if feasible. (See Bureau Manuals 8400, 8410, 8431 for more detail on the VRM system.)

APPENDIX L

RECREATION OPPORTUNITY SPECTRUM

Recreation Opportunity Spectrum (or ROS) is a conceptual framework designed for inventory, planning and management of public lands from a recreation perspective. Six ROS classes describe settings for recreation from the very developed urban setting at one end of the spectrum to the undeveloped, natural setting of a wilderness at the other.

ROS classifications are determined on the basis of physical, social and managerial setting criteria. Physical setting criteria include remoteness, size of area, and evidence of human use. Social setting criteria reflect the level and types of contacts between individuals or groups which can be expected in an area. Managerial setting criteria reflect the kind and extent of management services and facilities provided to support recreation use, and the restrictions placed on people's actions by the administering agency.

ROS can be used to describe the existing situation or a situation to develop for the future. It recognizes the diversity of needs and desired experiences of recreationists as a whole. (Please see Bureau Manual 8320, titled Planning for Recreation Resources, for a detailed description of ROS.)

APPENDIX M

ECONOMIC SAMPLE CALCULATION

| <u>Crop</u> | <u>Yield/Acre^{1/}</u> | <u>Price^{2/}</u> | <u>Sales/ Acre</u> | <u>% of Total</u> | <u>Total Sales</u> |
|------------------|--------------------------------|---------------------------|------------------------|-----------------------|------------------------|
| Alfalfa Estab. | 1.0 ton | \$71.15 | 71.15 | 1 | \$ 0.71 |
| Alfalfa | 7.0 ton | 71.15 | 498.05 | 5 | 24.90 |
| Winter Wheat | 105.0 Bu | 3.99 | 418.95 | 17 | 71.22 |
| Barley | 113.0 Bu | 2.94 | 332.22 | 17 | 56.48 |
| Potatoes | 425.0 CWT | 5.12 | 2,176.00 | 22 | 478.72 |
| Sugar Beets | 32.0 ton | 42.86 | 1,371.52 | 17 | 233.16 |
| Dry Edible Beans | 28.0 CWT | 17.69 | 495.32 | 21 | 104.02 |
| | | | | | <u>\$969.21</u> |

^{1/} As estimated for Soil Class 2, Canyon County.

^{2/} FY-1985 Normalized Crop Price.

| | | | |
|-------------------------------|------|------------------|-------------------------|
| Sales Per Acre | = \$ | 969 | |
| Total Acres | = | <u>1,020</u> | |
| TOTAL Sales | = | <u>\$988,400</u> | |
| Earnings/Gross Output Ratio | = | .383 | (U.S.D.C., B.E.A. 1977) |
| Direct Earnings | = | <u>\$378,600</u> | |
| Gross Output Multiplier | = | 2.549 | (U.S.D.C., B.E.A. 1977) |
| TOTAL Earnings | = | <u>\$965,100</u> | |
| Total Farm Earnings | = | \$96,317,000 | |
| % Direct of Total Farm | = | 0.4% | |
| Total RMP Area Earnings | = | \$2,336,753,000 | |
| % Total of Total RMP Earnings | = | 0.04% | |

Employment Calculations

| | | | | | | |
|--------------------|---|------------------|---|-----------------|---|----------------|
| Direct Earnings | = | \$378,600 | - | \$28,000 | = | 14 jobs |
| Secondary Earnings | = | <u>586,500</u> | - | <u>\$19,000</u> | = | <u>31 jobs</u> |
| TOTAL Earnings | = | <u>\$965,100</u> | | | = | <u>45 jobs</u> |

APPENDIX N

GROSS OUTPUT MULTIPLIERS BEA ECONOMIC AREA 159 1/

| Industry | WRC Sector 2/ | Multiplier |
|--------------------------------------|---|------------|
| Agriculture | (03) Meat Animals, Misc. Livestock | 2.662 |
| | (08) Vegetables, Sugar, Crops | 2.549 |
| Manufacturing | (19) Meat Products | 2.774 |
| | (27) Frozen Meats and Vegetables | 2.191 |
| | (29) Prepared Feed for Animals | 2.138 |
| | (34) Other Food Products | 2.060 |
| | (38) Lumber and Wood Products | 2.395 |
| | (46) Stone, Clay, and Glass Products | 2.122 |
| Retail Trade | (54) Wholesale and Retail Trade | 2.262 |
| Wholesale Trade | (54) Wholesale and Retail Trade | 2.262 |
| Services | (56) Services | 2.296 |
| Construction | (18) General Contractors | 2.022 |
| Finance, Insurance, Real Estate | (55) Finance, Insurance, Real Estate | 1.803 |
| Transportation and Public Utility | (53) Transportation, Communication, Public Utility | 1.978 |

Source: U.S. Water Resources Council, 1977.

1/ Bureau of Economic Analysis Area that includes the Cascade Resource Area.

2/ May include several Standard Industrial Classifications.

APPENDIX O

EARNINGS/GROSS OUTPUT RATIOS
REGION 159

| Industry | Calculation 1/ | Ratio |
|----------|--|-------|
| 03 | $\frac{1}{2.662} (.158) + (1 - \frac{1}{2.662}) (.3008)$ | 0.247 |
| 08 | $\frac{1}{2.549} (.511) + (- \frac{1}{2.549}) (.3008)$ | 0.383 |
| 18 | $\frac{1}{2.022} (.289) + (- \frac{1}{2.022}) (.3008)$ | 0.295 |
| 19 | $\frac{1}{2.774} (.095) + (- \frac{1}{2.774}) (.3008)$ | 0.227 |
| 27 | $\frac{1}{2.191} (.138) + (- \frac{1}{2.191}) (.3008)$ | 0.227 |
| 29 | $\frac{1}{2.183} (.040) + (- \frac{1}{2.183}) (.3008)$ | 0.179 |
| 34 | $\frac{1}{2.060} (.220) + (- \frac{1}{2.060}) (.3008)$ | 0.261 |
| 38 | $\frac{1}{2.395} (.239) + (- \frac{1}{2.395}) (.3008)$ | 0.275 |
| 46 | $\frac{1}{2.122} (.317) + (- \frac{1}{2.122}) (.3008)$ | 0.308 |
| 53 | $\frac{1}{1.978} (.311) + (- \frac{1}{1.978}) (.3008)$ | 0.306 |
| 54 | $\frac{1}{2.262} (.513) + (- \frac{1}{2.262}) (.3008)$ | 0.395 |
| 55 | $\frac{1}{1.803} (.160) + (- \frac{1}{1.803}) (.3008)$ | 0.223 |
| 56 | $\frac{1}{2.296} (.487) + (- \frac{1}{2.296}) (.3008)$ | 0.382 |

1/ Calculation Routine Described in U.S. Water Resources Council -
pg. 18

APPENDIX P

MONITORING AND EVALUATION

The decisions outlined in the Cascade RMP will be implemented over a period of ten to twenty years or more, depending on the availability of funding and manpower. The effects of implementation will be monitored and evaluated on a periodic basis over the life of the plan. The general purposes of this monitoring and evaluation will be:

- (1) To determine if an action is fulfilling the purpose and need for which it was designed, or if there is a need for modification or termination of an action.
- (2) To discover unanticipated and/or unpredictable effects.
- (3) To determine if mitigation measures are working as prescribed.
- (4) To ensure that decisions are being implemented as scheduled.
- (5) To provide continuing evaluation of consistency with state and local plans and programs.
- (6) To provide for continuing comparison of plan benefits versus costs, including social, economic, and environmental.

A specific monitoring plan will be written for the wildlife, watershed, and range programs. This plan will provide a framework for choosing the study methods that will provide the information needed to issue and implement specific management decisions which effect watershed, wildlife, and range. Monitoring efforts will focus on allotments in the Improve category. For the range program, methodologies are available for monitoring vegetative trend, forage utilization, actual use (livestock numbers and periods of grazing), and climate. The data collected from these studies will be used to evaluate current stocking rates, to schedule pasture moves by livestock, to determine levels of forage competition, to detect changes in plant communities, and to identify patterns of forage use. If monitoring studies indicate that allotment or area objectives are not being met then management actions will be adjusted accordingly. For the grazing program, this may include adjusting livestock seasons of use, livestock stocking levels or the grazing system being used or exclusion of livestock via fencing.

Minimum monitoring standards have been adopted by the State of Idaho, Bureau of Land Management. They are included in the Minimum Monitoring Standards for BLM-Administered Rangelands in Idaho. See the attached table for minimum data elements to be monitored for various resource values as described in the Handbook. New studies will be consistent with the minimum standards recommendations. More intensive or specialized studies may be utilized if a management need exists and funding is available.

Priorities for monitoring grazing allotments will be established in the Plan Decision Document. The methodology and intensity of study that is chosen for a particular allotment will be determined by the nature and severity of the resource conflicts that are present in that allotment.

For the wildlife program, monitoring will be directed at the biotic resource components using both temporary and permanent studies. The findings from these studies can be used to monitor responses in habitat condition and trend; monitor forage availability, composition, and vigor; monitor changes in cover and habitat effectiveness; and monitor habitat management objectives.

For timber management, monitoring will be on a stand basis for determining the need and timing of silvicultural practices or adjustment in harvesting techniques. The program will be monitored to ensure compliance with both timber harvest and aquatic management objectives.

Monitoring for the watershed program will mainly involve monitoring soil erosion, although trend in stream bank stability and water quality will be monitored for mining, forestry activities, and grazing activities.

Water quality will be monitored by collecting water samples in key streams and analyzing the appropriate parameters for these locations. Samples will be taken during key water conditions, usually high and low water flows, for several consecutive years.

Specific monitoring plans for other programs will be developed if the need arises.

The data collected from the monitoring and evaluation process will be analyzed and fed back into the decision making process. This will provide information regarding the effects of the land use decisions, the adequacy of mitigation methods, etc. If monitoring indicates that significant unexpected adverse impacts are occurring or the mitigating measures are not working as predicted, it may be necessary to amend or revise the RMP. Conversely, if implementation and mitigating efforts are highly successful, monitoring and evaluation efforts may be reduced.

Minimum Data Elements
to be Monitored for
Various Resource Values
on Rangelands*

| Resource Value | Trend | Herbage Utilization | Actual Annual Use | Condition | Climate |
|------------------------------|-------------------------------|------------------------|-------------------------|-----------|-----------|
| Livestock | 2,3 (intensive mgmt areas) | a | yes | <u>2/</u> | <u>3/</u> |
| | 3 (less intensive areas) | <u>1/</u> | | | |
| Wildlife | | | | | |
| (Upland Birds & big game) | 1,2,3 | a,b | yes | | |
| Watershed | 2,3 | N/A | N/A | | |
| Fisheries | 3 | N/A | N/A | | |
| Timber | "Specialized" | Studies | Required | | |
| Recreation | "Specialized" | Studies | Required | | |
| Paleontologic Resource | "Specialized" | Studies | Required | | |
| Cultural Resources | "Specialized" | Studies | Required | | |
| Water Quality | "Specialized" | Studies | Required | | |

- 1/ Intensive: Conflicts and possible significant adjustment needed.
Less Intensive: No real conflicts.
2/ Required by law.
3/ Necessary to analyze all monitoring elements.

Key to Data Elements Chart

Trend Data Information

1. Cover
2. Frequency
3. Photo Plot

Utilization

- a. Utilization pattern mapping.
- b. Extensive Browse Transect Method (used when browse utilization date is needed. i.e. big game winter ranges.)
- c. Only utilization portion will typically be used.

* Source - Minimum Monitoring Standards for BLM - Administered Rangelands in Idaho (1984).

APPENDIX Q

WILDLIFE HABITAT ANALYSIS AND IMPACT PREDICTION METHODOLOGY

The condition and abundance of wildlife populations is highly dependent on the quality of their habitat (Dasmann 1964). Optimum food, water, and cover factors will produce healthy herds, capable of surviving periods of stress.

Major vegetation classes in the RMP area were identified using LANDSAT. Each class was analyzed as to its vegetative quality and given a range condition rating of poor, fair or good. The amount of quality forage plants and vegetative species characteristics (nutritional values, annual or perennial) were used to determine the rating of an individual vegetation class. In all cases, the good rating class provided the best wildlife habitat condition.

In Chapter 2 analysis, the term wildlife unit months was used for elk, deer and antelope. This term stands for EUMs (elk unit months), DUMs (deer unit months), AtUMs (antelope unit months).

An EUM is defined as the amount of forage needed to sustain one elk for 30 days. The same definition applies to deer and antelope respectively.

Winter use is defined as use during the months of December, January, February, and March. Yearlong use is defined as habitat use for all 12 months of the calendar year.

The effects of each alternative were analyzed for each major wildlife species. Grazing systems, stocking rates, AMPs, season-of-use, timber harvest, and lands actions were major variables included in the final estimate of the impacts on wildlife. The final impacts were then compared to the population goals set for the areas by the Idaho Department of Fish and Game.

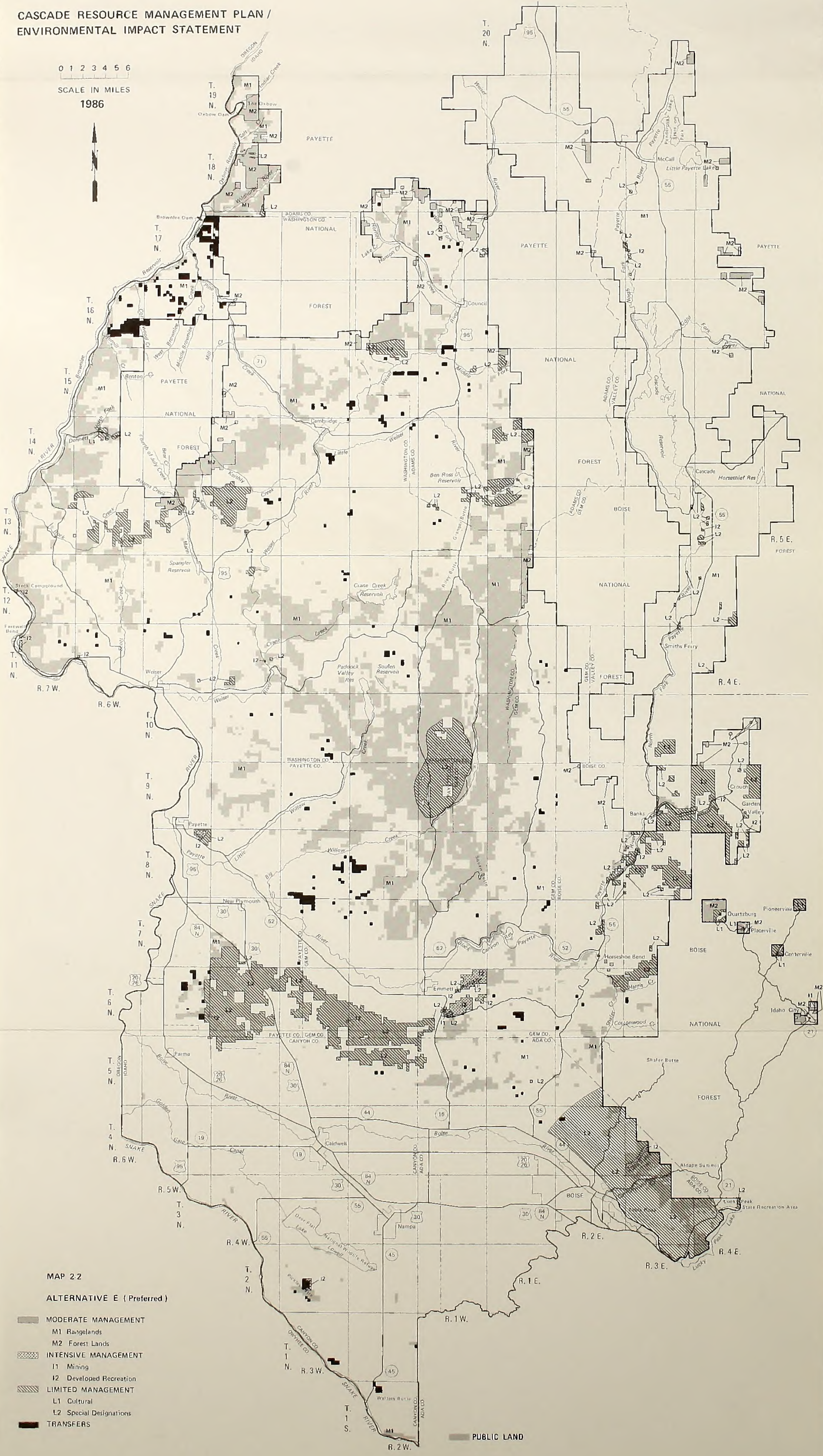
MAP 2.1

ALTERNATIVES



CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986



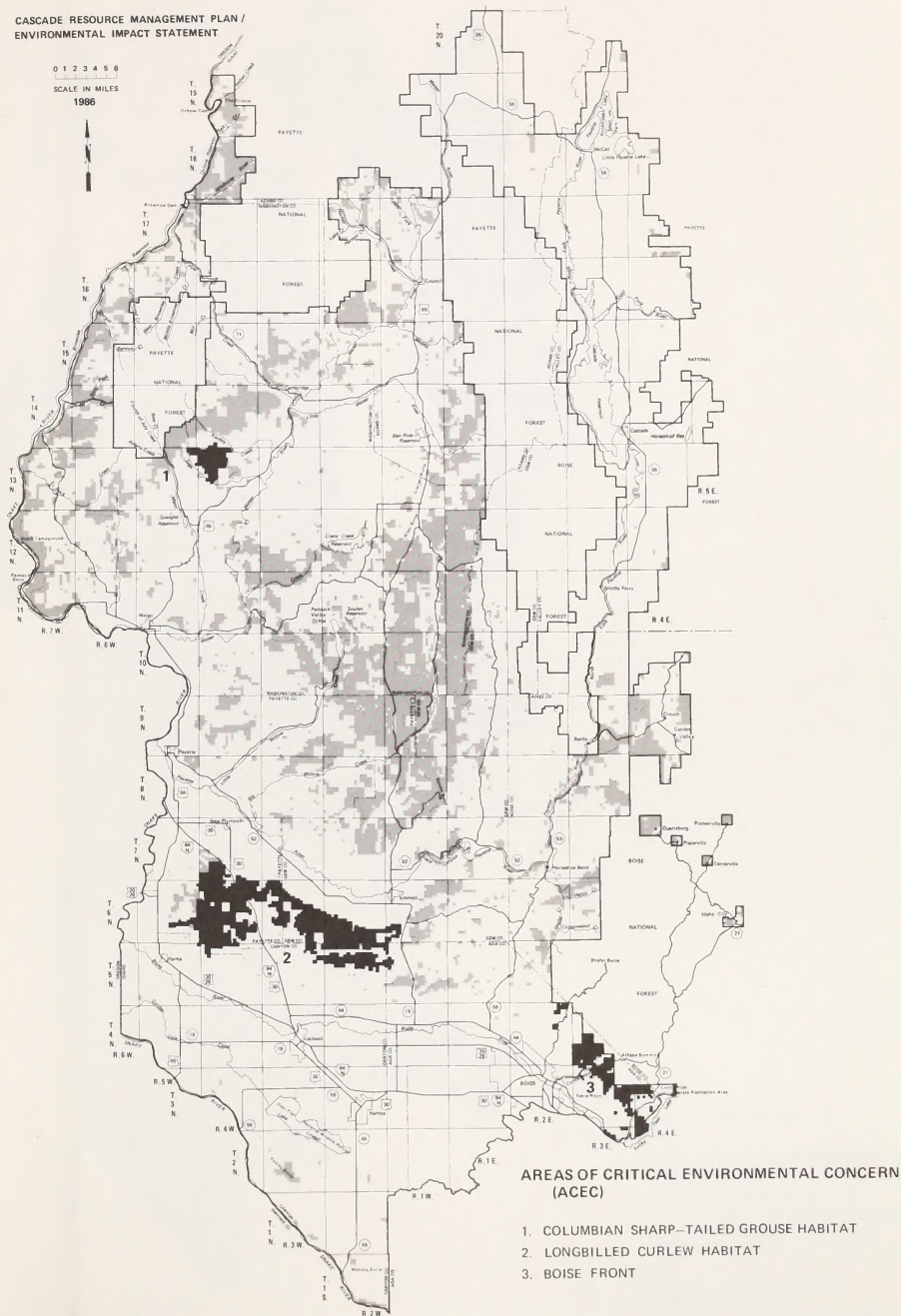
MAP 2.2
ALTERNATIVE E (Preferred)

- MODERATE MANAGEMENT
 - M1 Rangelands
 - M2 Forest Lands
- INTENSIVE MANAGEMENT
 - I1 Mining
 - I2 Developed Recreation
- LIMITED MANAGEMENT
 - L1 Cultural
 - L2 Special Designations
- TRANSFERS

PUBLIC LAND

MAP 2-3

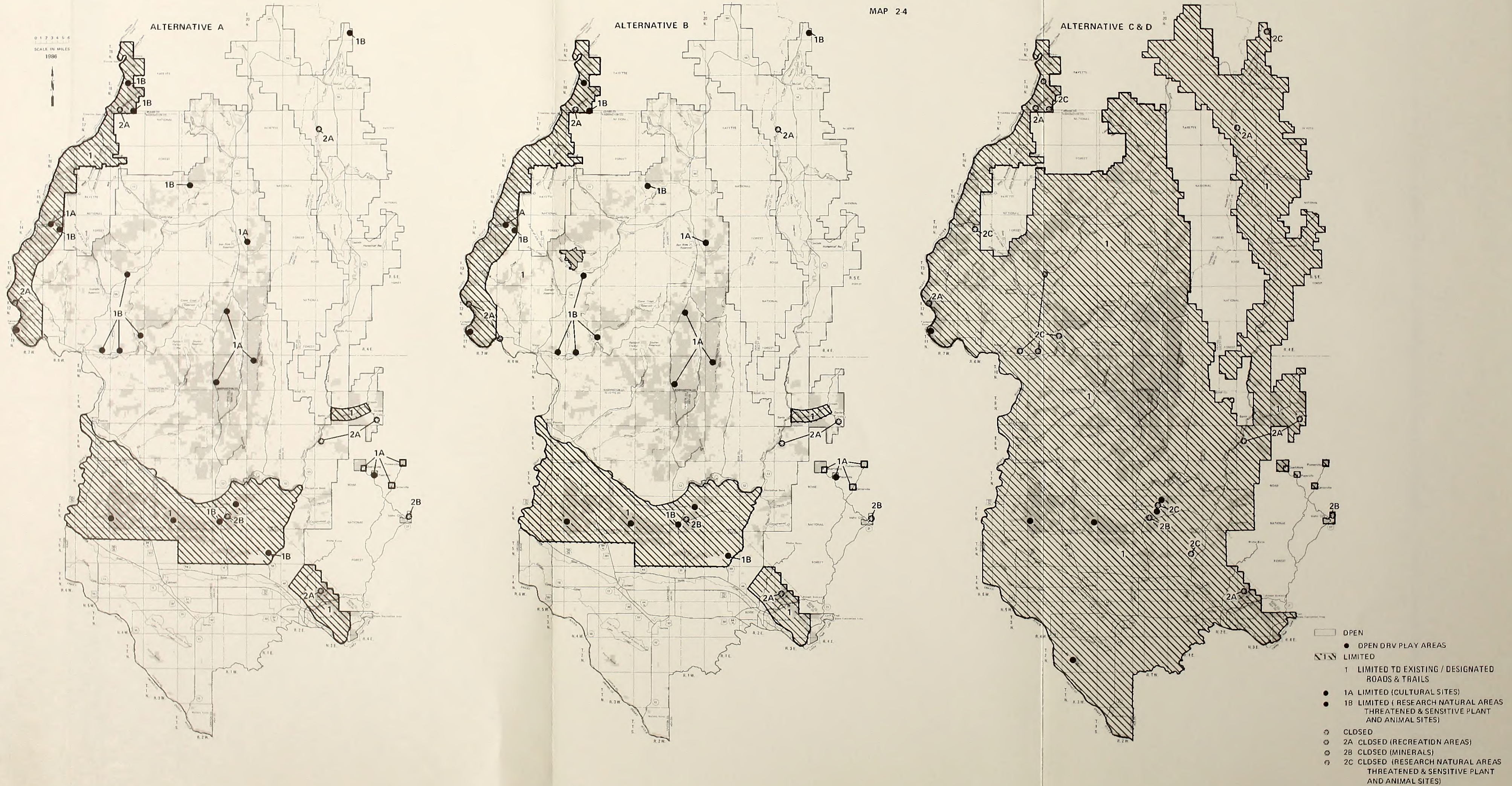
CASCADE RESOURCE MANAGEMENT PLAN /
ENVIRONMENTAL IMPACT STATEMENT



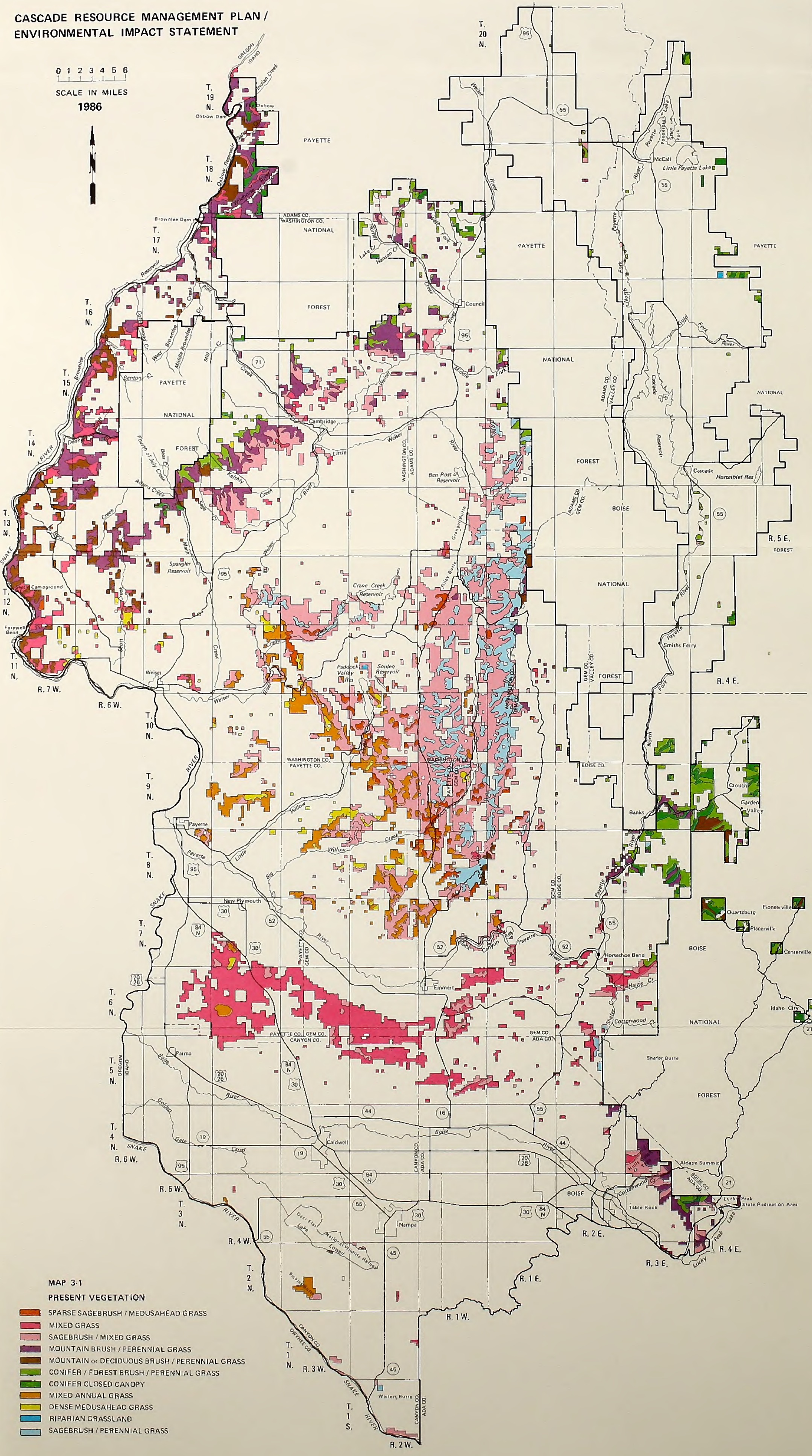
CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

OFF-ROAD VEHICLE DESIGNATIONS BY ALTERNATIVES

MAP 24



CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

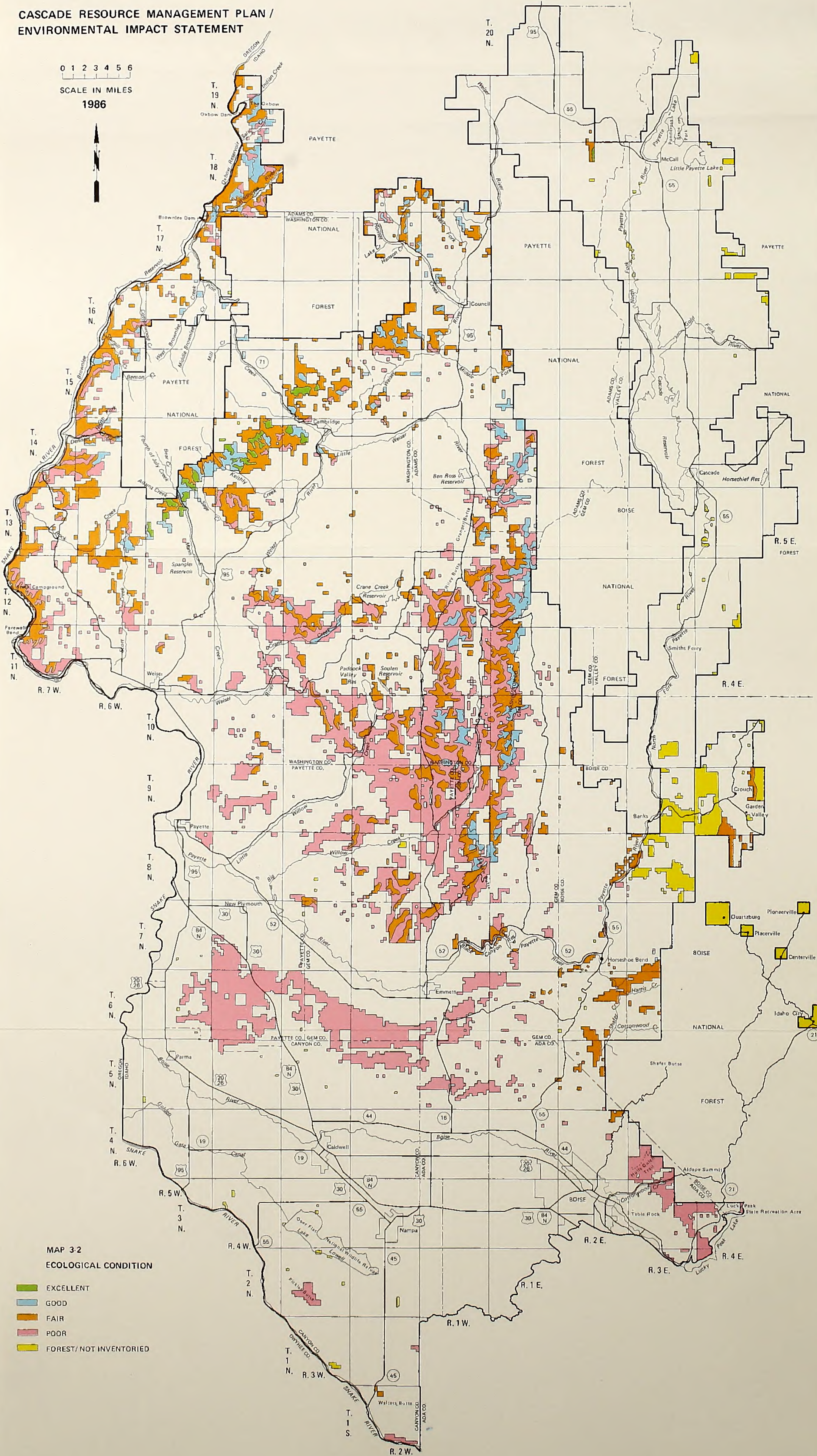


MAP 3-1
PRESENT VEGETATION

- SPARSE SAGEBRUSH / MEDUSAHEAD GRASS
- MIXED GRASS
- SAGEBRUSH / MIXED GRASS
- MOUNTAIN BRUSH / PERENNIAL GRASS
- MOUNTAIN or DECIDUOUS BRUSH / PERENNIAL GRASS
- CONIFER / FOREST BRUSH / PERENNIAL GRASS
- CONIFER CLOSED CANOPY
- MIXED ANNUAL GRASS
- DENSE MEDUSAHEAD GRASS
- RIPARIAN GRASSLAND
- SAGEBRUSH / PERENNIAL GRASS

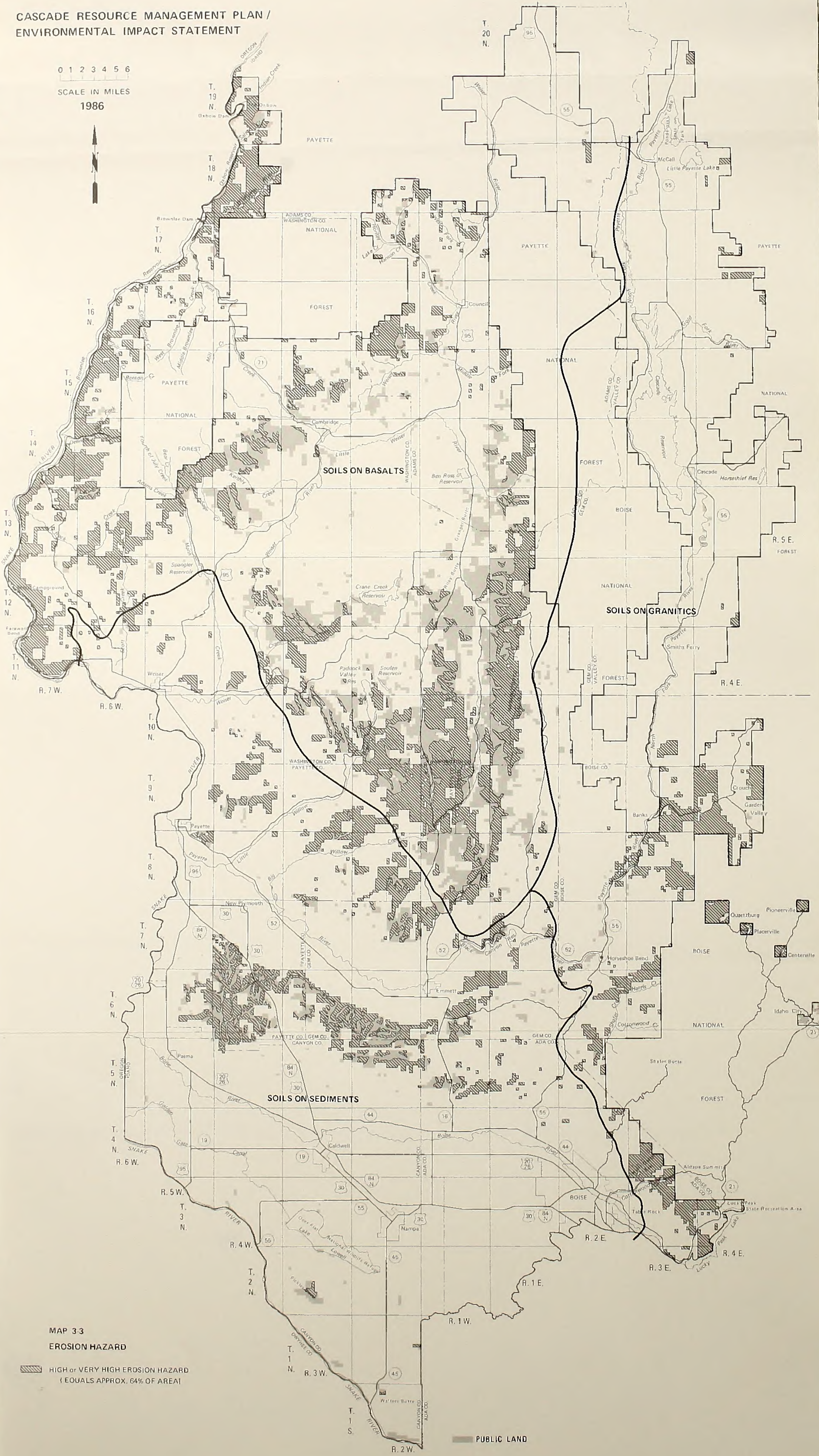
CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986



CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986

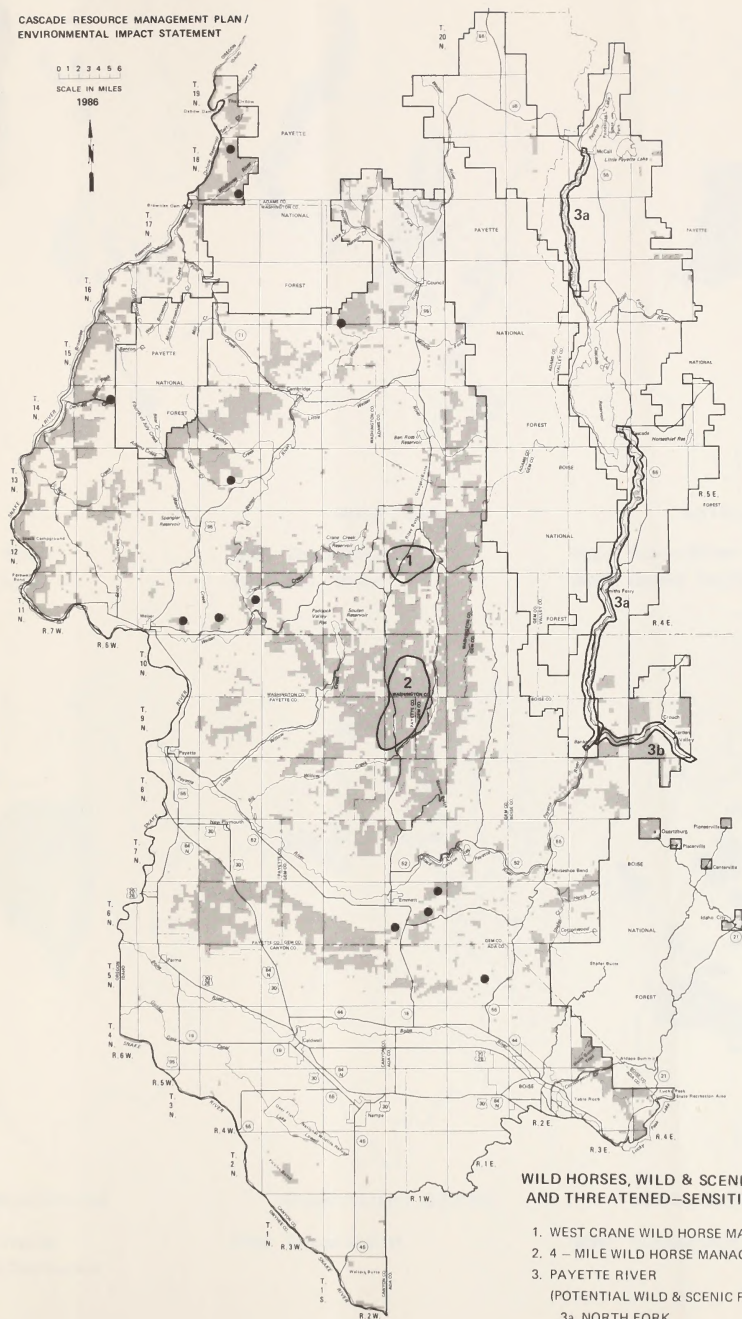


MAP 3-3
EROSION HAZARD

HIGH or VERY HIGH EROSION HAZARD
(EQUALS APPROX. 64% OF AREA)

PUBLIC LAND

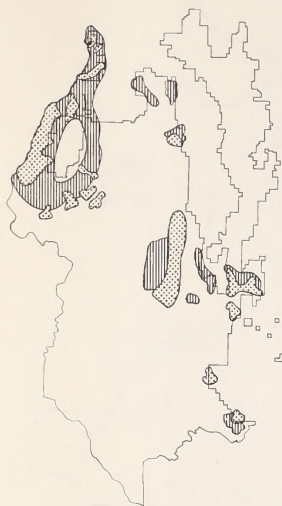
CASCADE RESOURCE MANAGEMENT PLAN /
ENVIRONMENTAL IMPACT STATEMENT



**WILD HORSES, WILD & SCENIC RIVERS
AND THREATENED-SENSITIVE PLANTS**

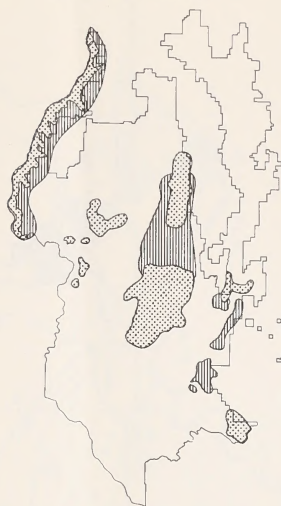
1. WEST CRANE WILD HORSE MANAGEMENT AREA
2. 4 - MILE WILD HORSE MANAGEMENT AREA
3. PAYETTE RIVER
(POTENTIAL WILD & SCENIC RIVER)
 - 3a NORTH FORK
 - 3b SOUTH FORK
- THREATENED & SENSITIVE PLANT SITES

MAP 3-5
WILDLIFE HABITAT



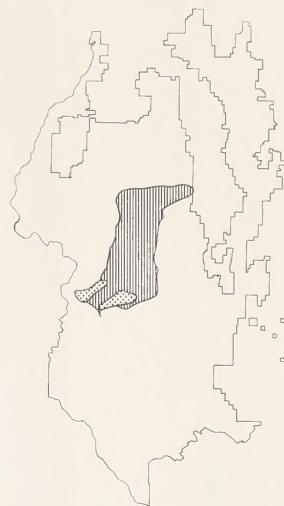
ELK

Crucial Winter
Fall / Winter



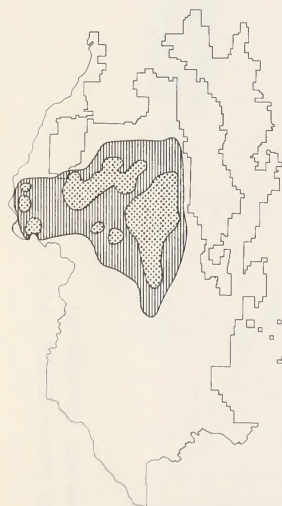
MULE DEER

Crucial Winter
Fall / Winter



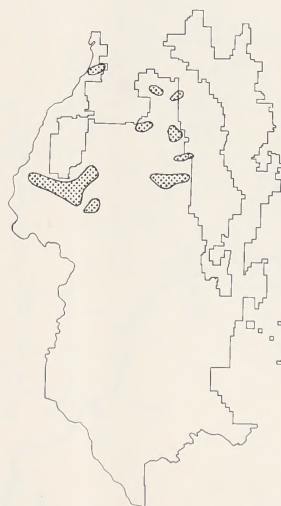
ANTELOPE

Crucial Winter
General Distribution



SAGEGROUSE

Crucial Habitat
General Distribution



SHARP-TAILED GROUSE

Crucial Habitat

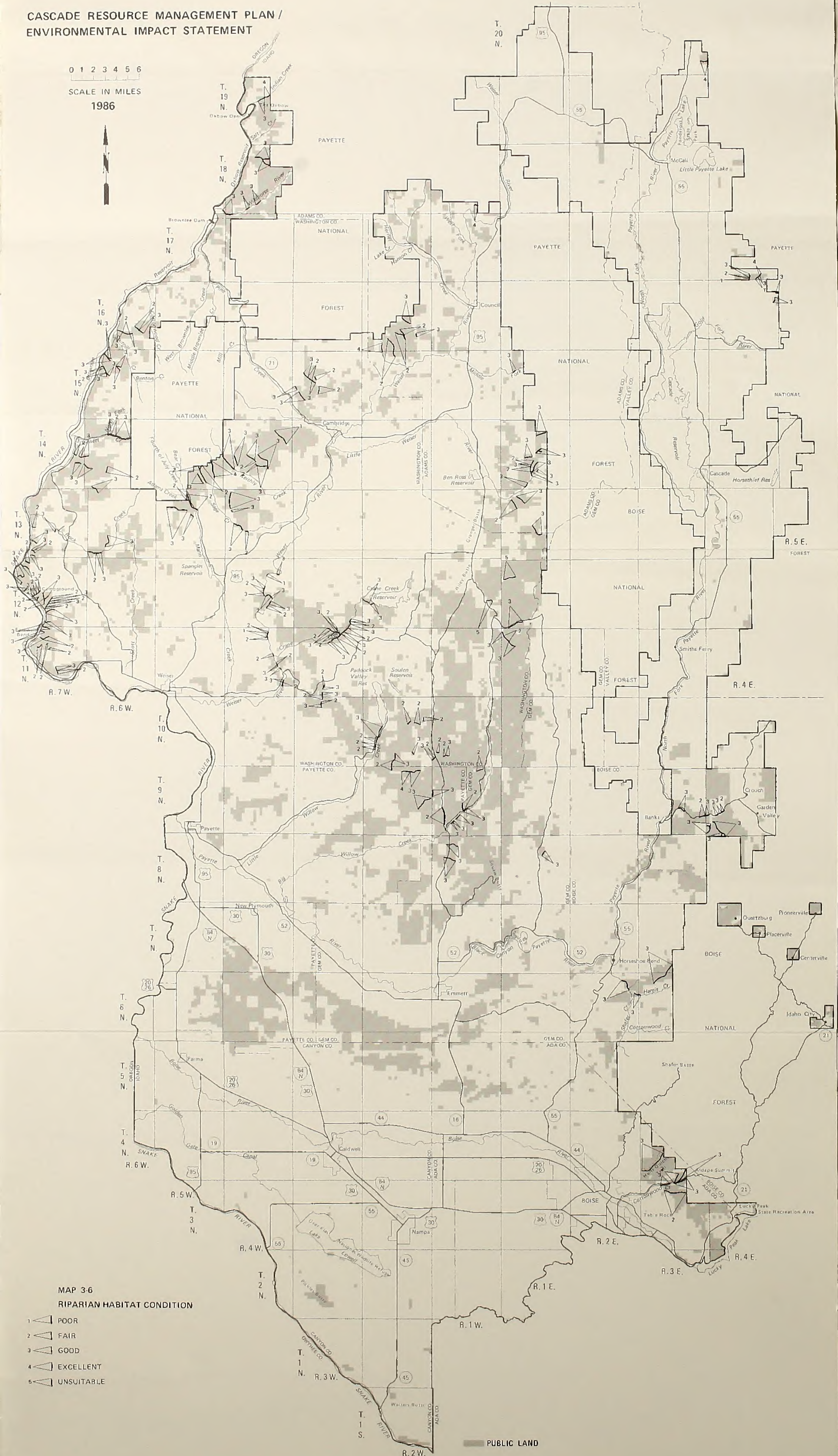


LONG-BILLED CURLEW

Concentration Areas

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

0 1 2 3 4 5 6
SCALE IN MILES
1986



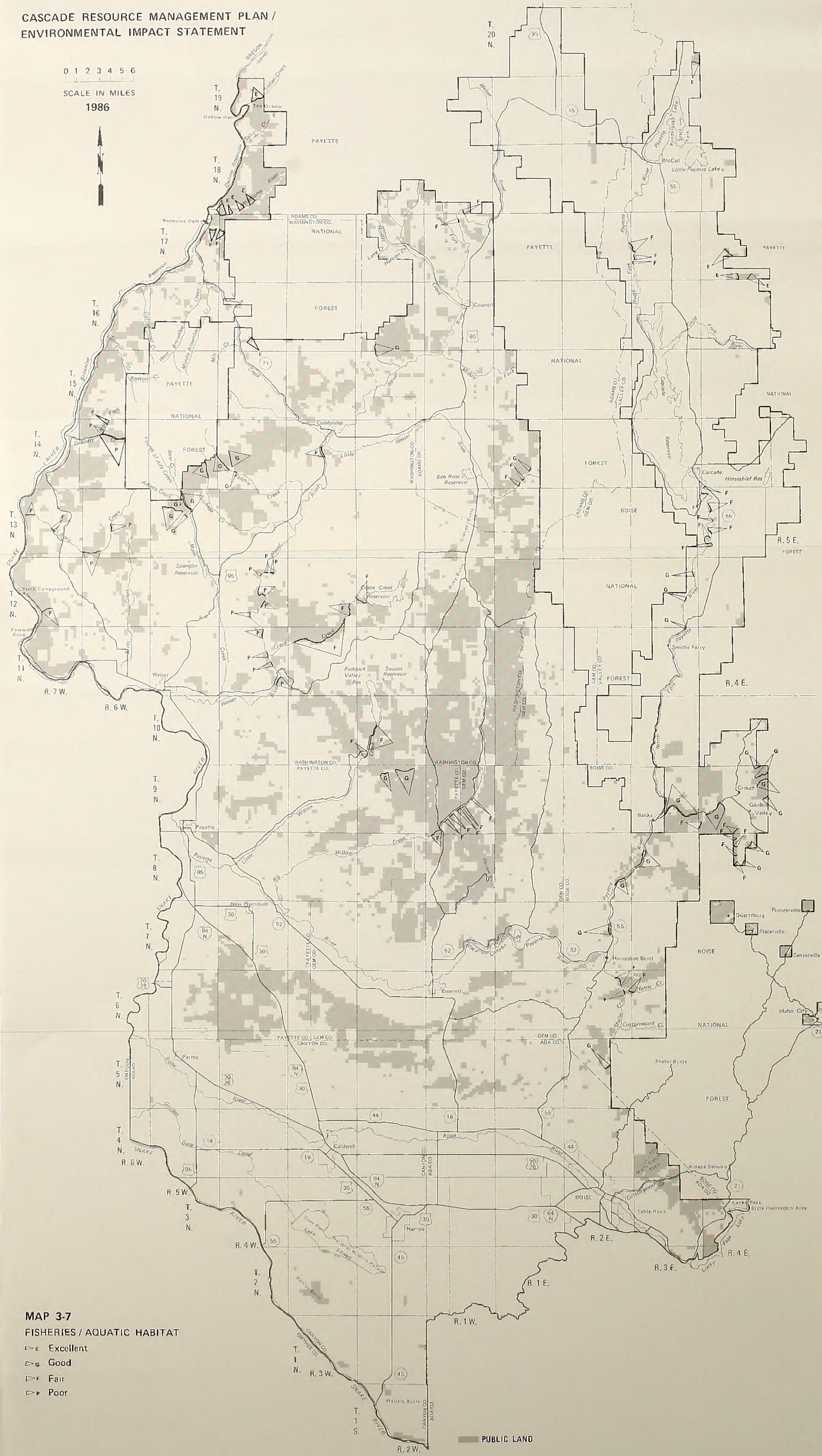
MAP 3-6
RIPARIAN HABITAT CONDITION

- 1 POOR
- 2 FAIR
- 3 GOOD
- 4 EXCELLENT
- 5 UNSUITABLE

PUBLIC LAND

CASCADE RESOURCE MANAGEMENT PLAN / ENVIRONMENTAL IMPACT STATEMENT

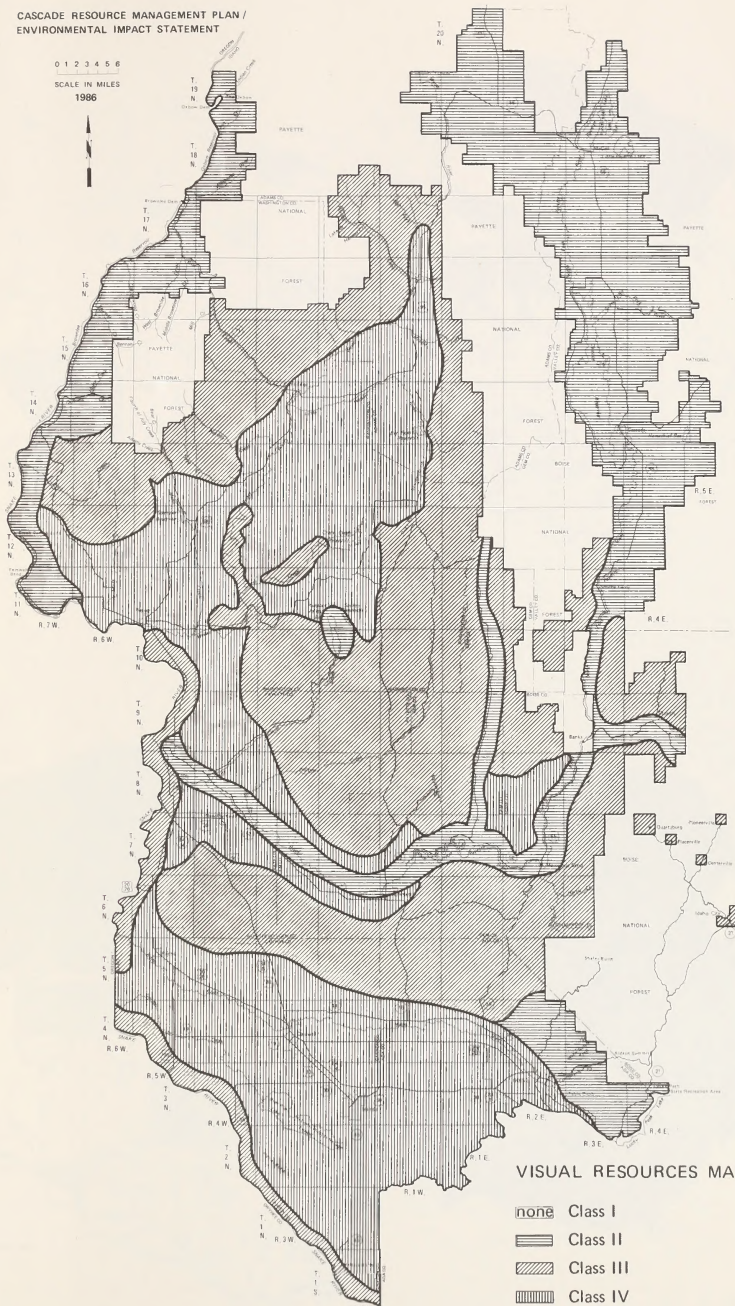
0 1 2 3 4 5 6
SCALE IN MILES
1986



MAP 3-7
FISHERIES / AQUATIC HABITAT
E Excellent
G Good
F Fair
P Poor

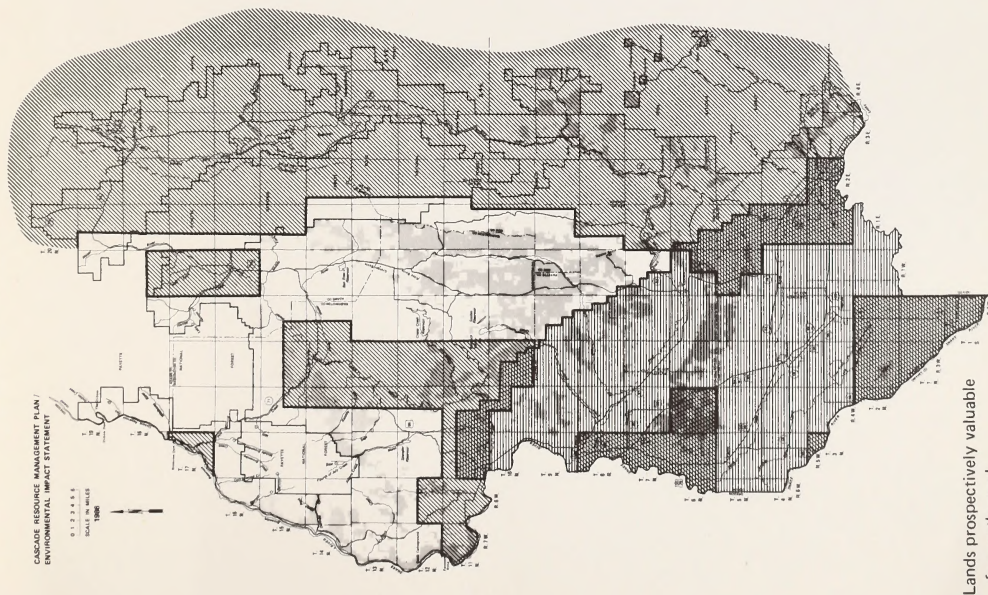
PUBLIC LAND

CASCADE RESOURCE MANAGEMENT PLAN /
ENVIRONMENTAL IMPACT STATEMENT

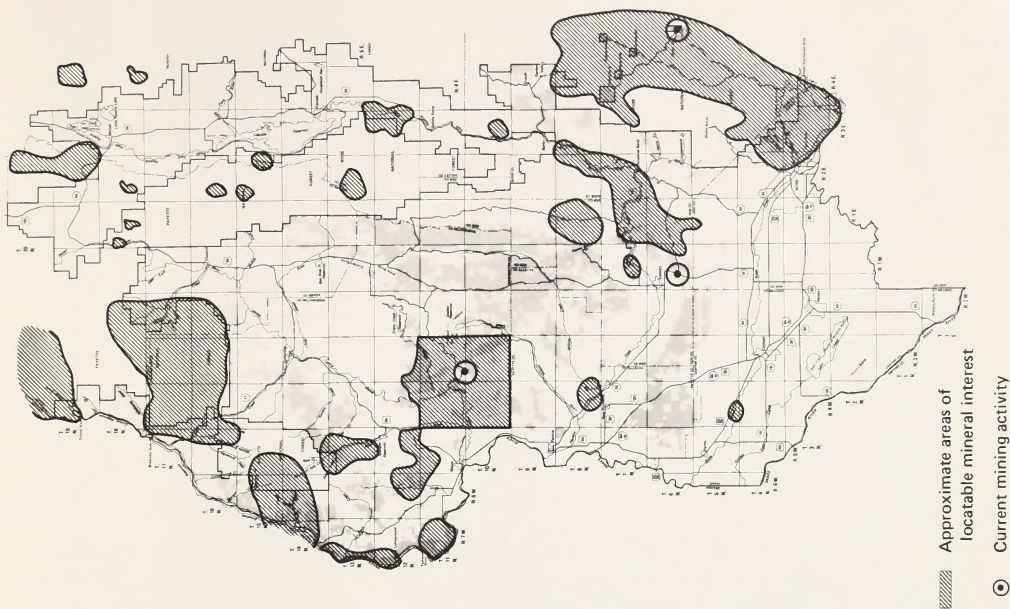


MAP 3-9

LEASEABLE MINERALS



LOCATABLE MINERALS



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
BOISE DISTRICT
3948 DEVELOPMENT AVENUE
BOISE, IDAHO 83705

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF THE INTERIOR
INT-415